

THE "AVO" TRANSISTOR DATA MANUAL

THIRD
EDITION



INTERNATIONAL TRANSISTOR DATA MANUAL



AVO LTD

"AVOCET HOUSE", ARCHCLIFFE ROAD, DOVER, KENT, ENGLAND

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"AVO" International Transistor Data Manual

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AVO
INTERNATIONAL
TRANSISTOR DATA
MANUAL

THIRD EDITION

EDITOR C. E. BULL

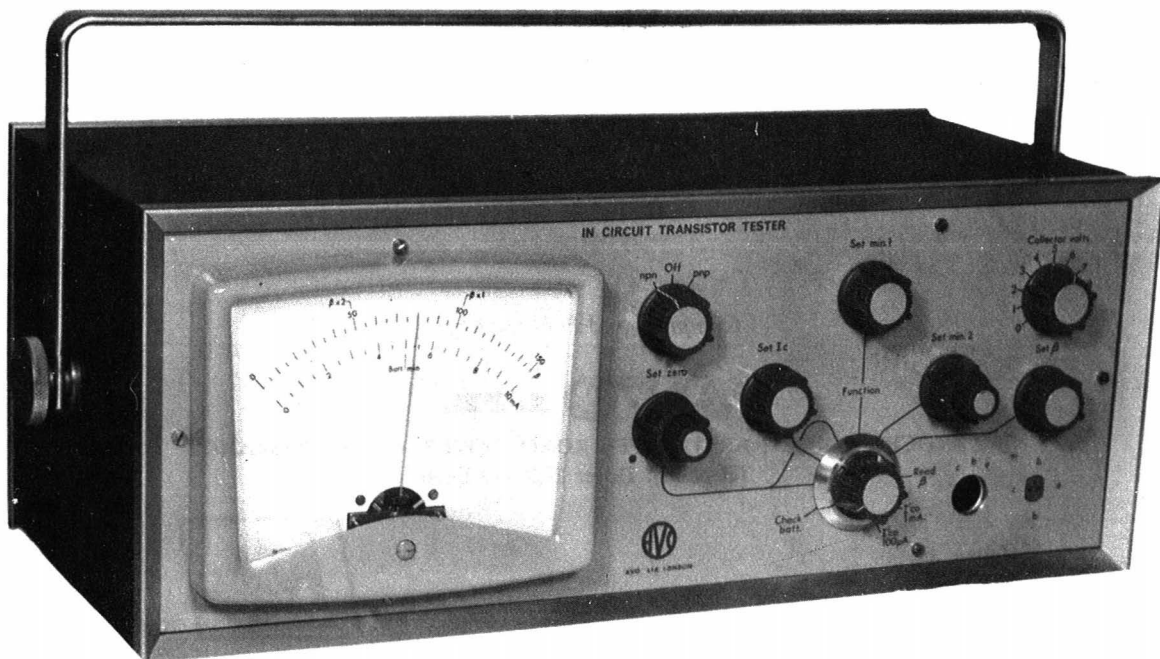
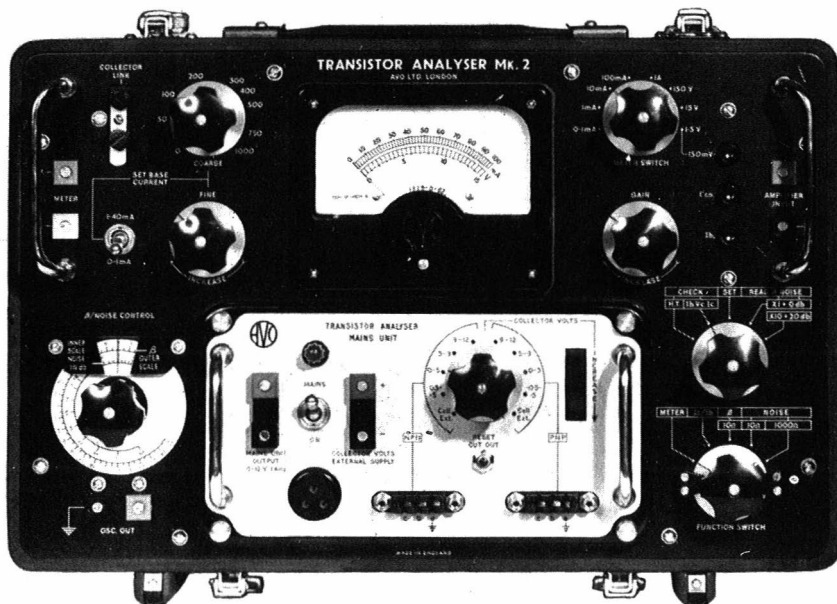


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FOREWORD

This International Transistor Data Manual is intended for use in conjunction with our Transistor Tester, but the information is presented in such a manner that it forms a quick convenient guide for general use.

In a number of cases it will be found that the information is not applicable to these instruments, but such information has been included in order that this publication may be used as a reference work.

It is our intention to publish further editions of this Manual from time to time, if the enclosed postcard should be completed and returned to us, the user will then be informed when further editions become available.

1. SYMBOLS AND EQUIVALENTS USED IN THIS MANUAL

The large number of symbols adopted by transistor manufacturers has given rise to considerable confusion. Therefore, to assist the user, a list of symbols and equivalents is listed below. The symbols printed in heavy type are used in the "AVO" International Transistor Data Manual and this publication.

V_{ce}	Collector to emitter voltage.
V_{ce(sat)}	Collector to emitter voltage under saturation conditions.
β h_{fe} h_{21e} α'	
β α' h_{FE}	
I'_{co} I_{CEO}	Collector to emitter leakage current.
I_{co} I_{cbo}	Collector to base leakage current with emitter open circuit.
V_T BV_{CEO}	Turnover or breakdown voltage.
NF	Noise figure.
α h_{fb} h_{21b}	Small Signal Current gain in the grounded-base figuration.

Whilst every care has been taken in the preparation of this manual to ensure that the data given is correct, the Company cannot accept any responsibility for damage caused to a Transistor under test, or the instrument, due to the inclusion of incorrect information.

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NOTES RELATING TO THIS MANUAL

Col. 1 — Transistor. Transistors are in strict numerical/alphabetical order.

Col. 2 — Manufacturer. The abbreviations given under these headings are listed on pages 8-17. Where the code is marked thus ' Δ ', it indicates that the manufacturer no longer produces transistors.

Col. 3 — Type. NPN or PNP Point Contact transistors are tested as PNP devices.

Col. 4 — No. This refers to the diagram of connections which are shown on folders on facing page.

Col. 5 — V_{ce} . This is the voltage at which I'_{co} is measured.

Cols. 6 & 7 — I'_{co} . These are typical and maximum values for collector to emitter leakage current ; the figures quoted are for a temperature of 25°C (77°F) ; an increase of 10°C will approximately double the leakage current. Many manufacturers only quote I_{co} , but I'_{co} may be calculated using the formula $I'_{co} = I_{co} \times \beta - I_{co}$. It will be found that I'_{co} will be fairly constant over a wide range of V_{ce} .

Col. 8 — V_{ce} . This is the collector to emitter voltage at which β and $\bar{\beta}$ are measured.

Col. 9 — I_c . This is the collector current at which β and $\bar{\beta}$ should be measured.

Cols. 10, 11, 12 — Beta. β measurements should be made at the collector voltage and current given in columns 8 and 9. The figures given in these three columns are normally for small signal current gain (β), but data marked thus ' \uparrow ' indicates that the figure is for d.c. current gain ($\bar{\beta}$).

Cols. 13, 14 and 15 — Typical Noise. The typical noise figure quoted is for use at the V_{ce} and I_c given in columns 13 and 14. However, it should be noted that this test is only a qualitative one, and that wide variations are possible. Data marked thus ' * ' indicates the maximum noise figure of the transistor.

Cols. 16, 17 and 18 — Maximum Ratings. The maximum ratings are given to enable the user to test transistors under conditions other than those quoted in this publication, thus ensuring that the transistor under test is not damaged due to it exceeding the manufacturer's recommendations. Wherever possible, collector dissipation has been quoted for use without a heat sink, but data marked thus ' \uparrow ' indicates that the figure is for use with a heat sink.

Col. 19 — Remarks. This column provides further information which might be of use to the user, i.e., CV equivalents, etc.

Col. 20 — Transistor. This is a duplication of column 1, and has been included to enable the user to extract data easily should the pages not be in perfect alignment.

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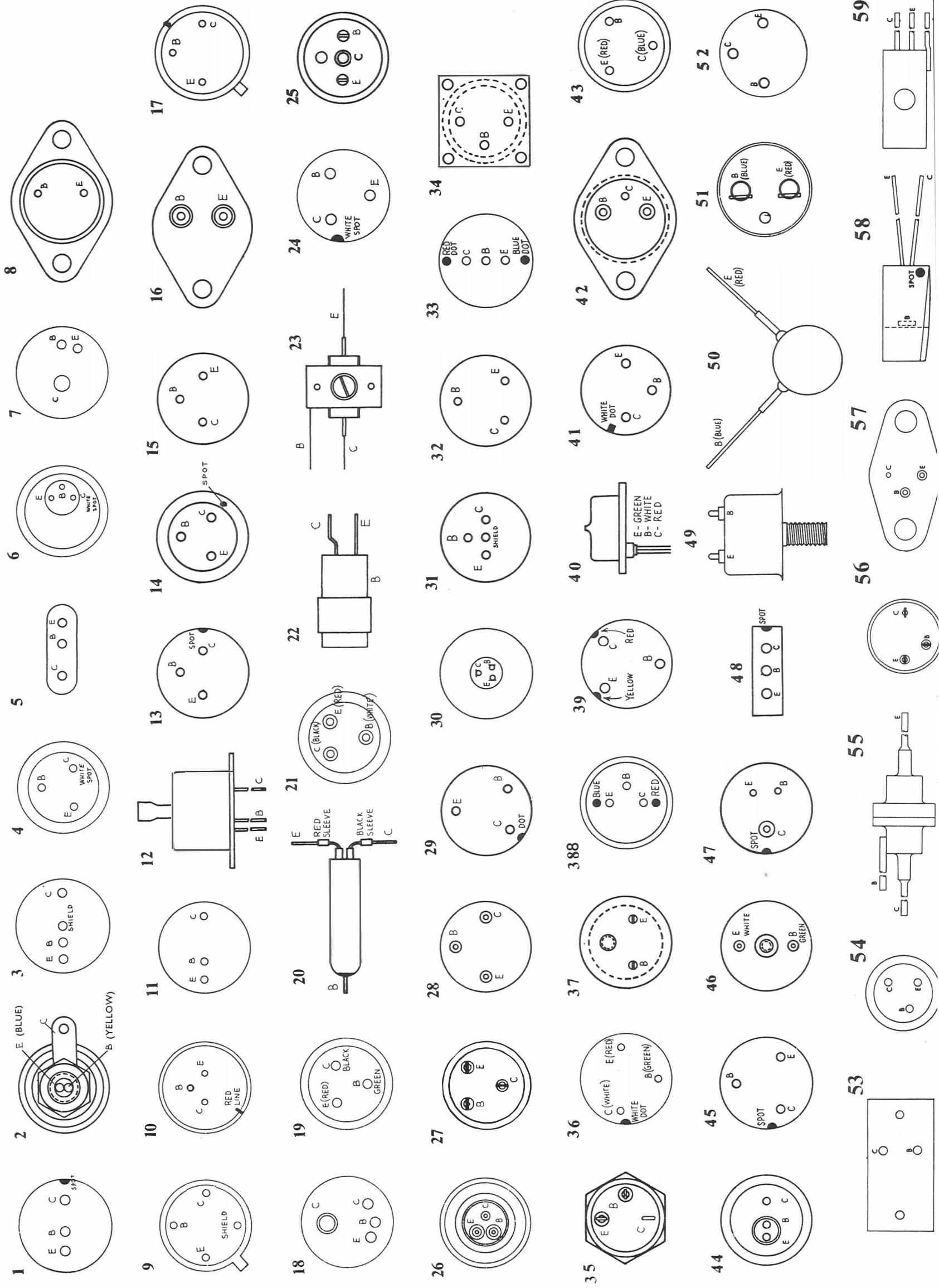


DIAGRAM OF TRANSISTOR CONNECTIONS (CONTINUED)

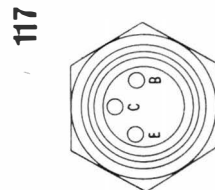
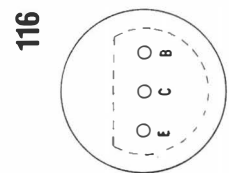
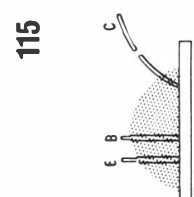
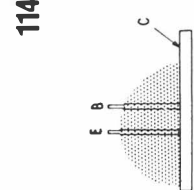
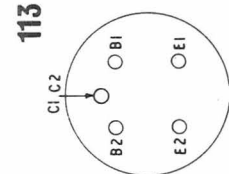
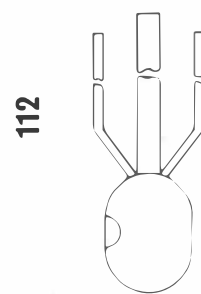
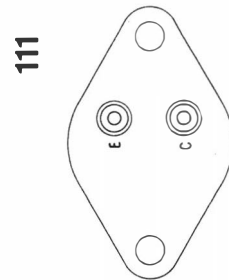
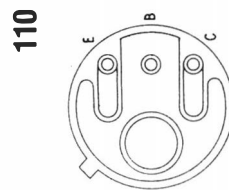
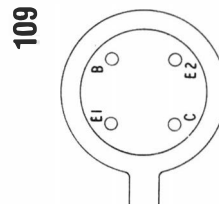
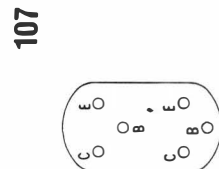
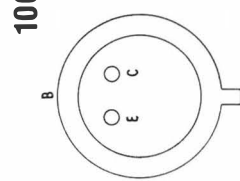
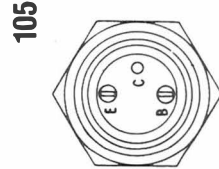
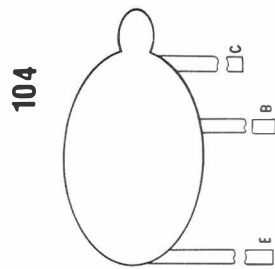
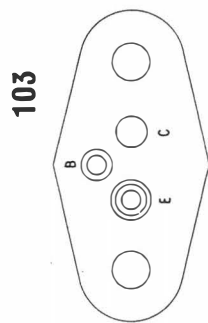
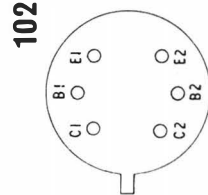
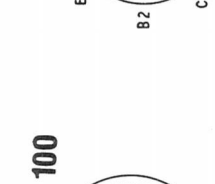
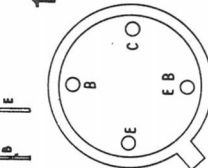
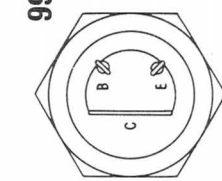
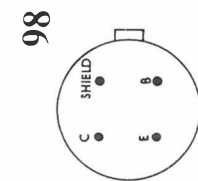
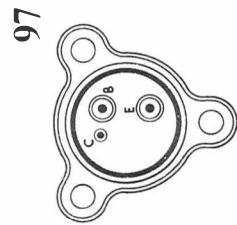
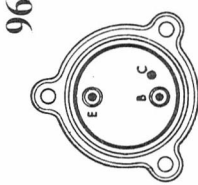
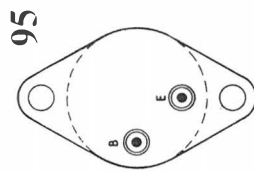
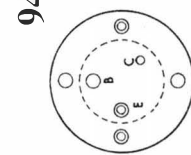
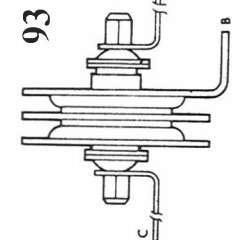
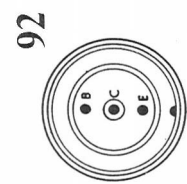
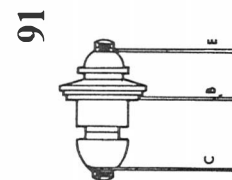
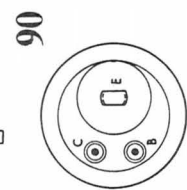
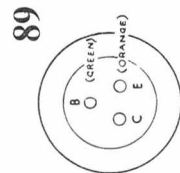
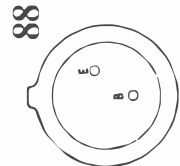
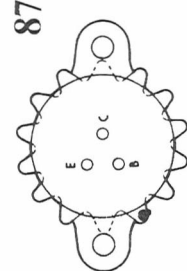
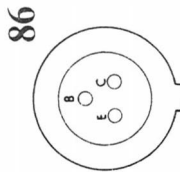
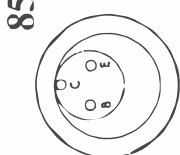
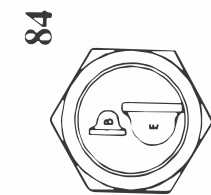
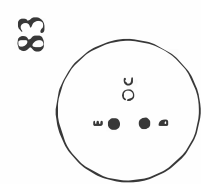
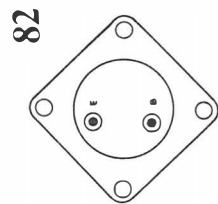
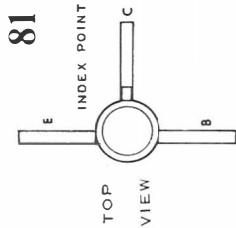
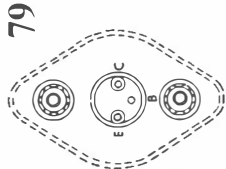
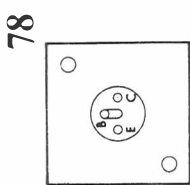
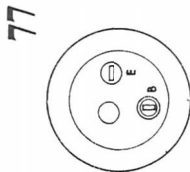
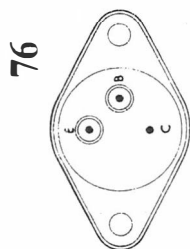
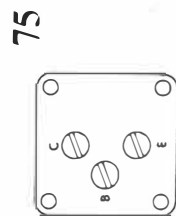
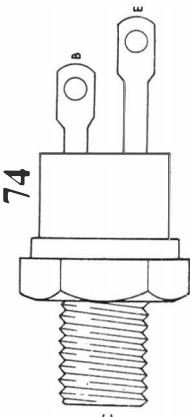
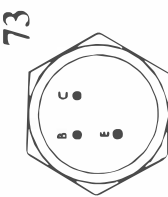
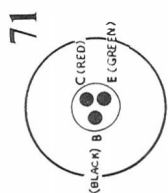
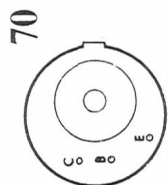
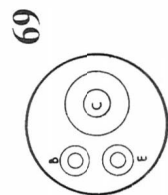
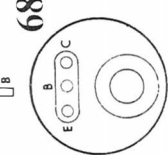
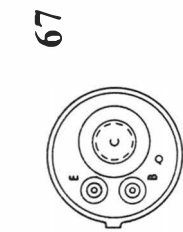
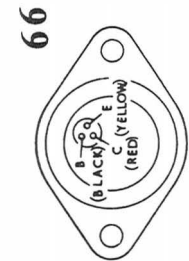
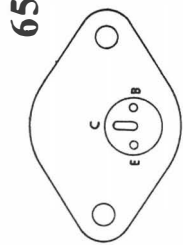
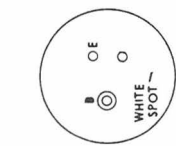
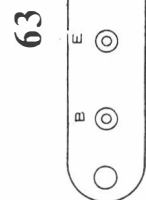
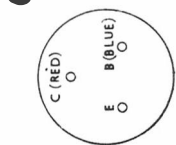
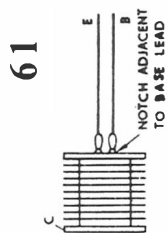
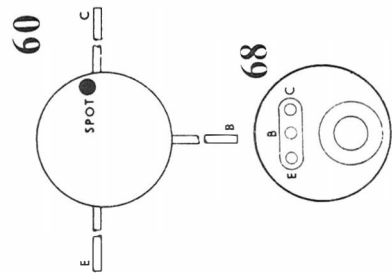
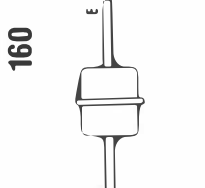
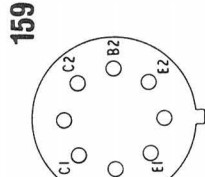
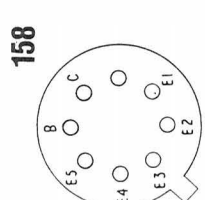
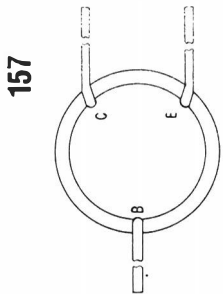
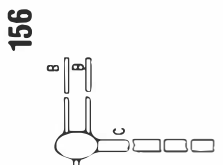
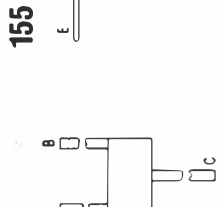
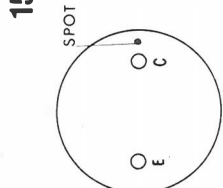
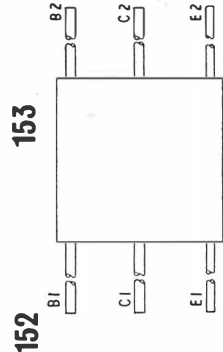
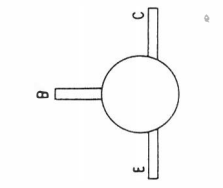
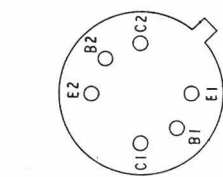
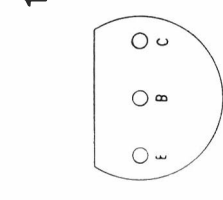
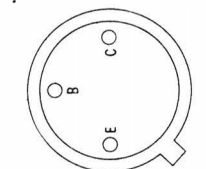
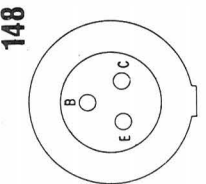
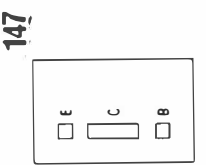
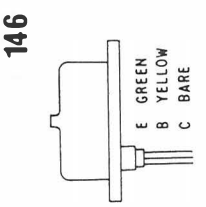
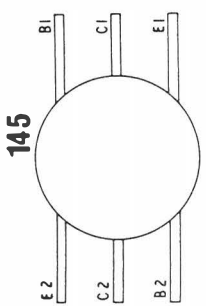
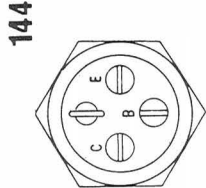
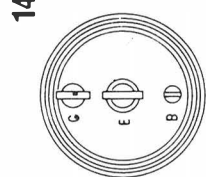
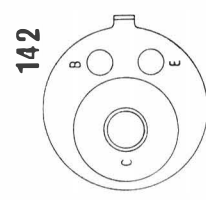
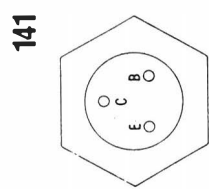
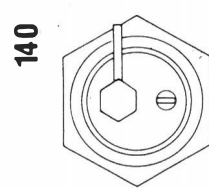
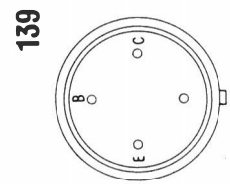
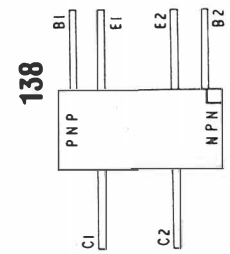
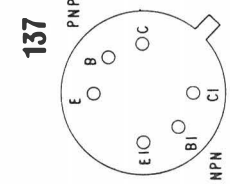
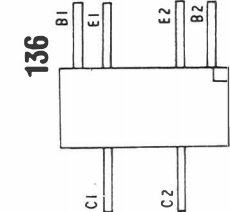
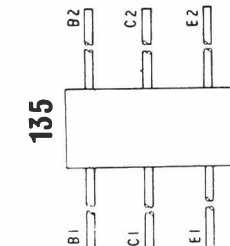
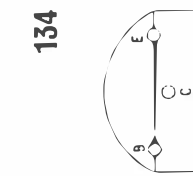
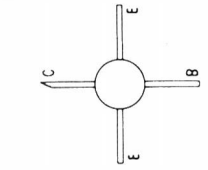
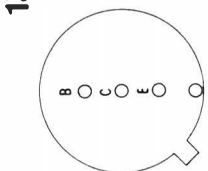
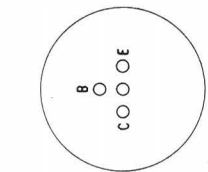
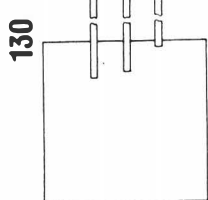
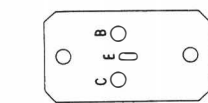
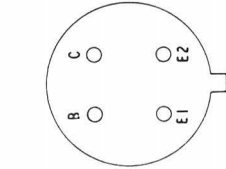
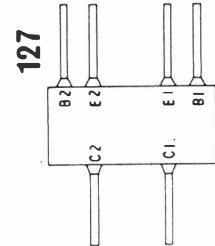
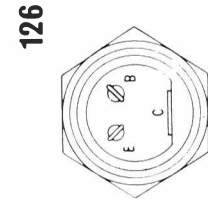
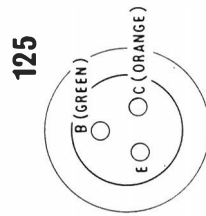
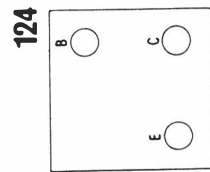
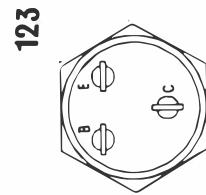
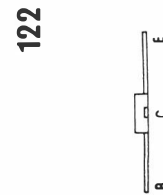
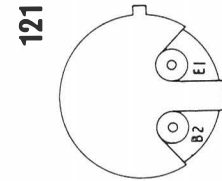
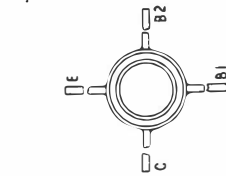
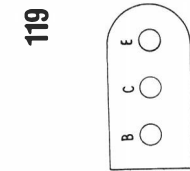
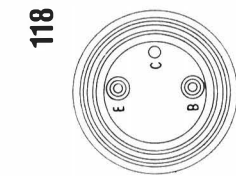


DIAGRAM OF TRANSISTOR CONNECTIONS



CODE MANUFACTURER**AGENT OR SUBSIDIARY IN THE U.K.**

BEL	Belvu Semi-Conducteurs, 11 Rue Raspail, Malakoff (Seine), France.	
BEN	Bendix Semicon Division, South Street Holmdel, New Jersey, U.S.A.	Field Tech Ltd., London (Heathrow) Airport, Hounslow, Middlesex.
BO	Bogue Electric Manufacturing Co., 100, Pennsylvania Avenue, Patterson 3, New Jersey, U.S.A.	Systems Engineering Services Ltd., 34, Bloomsbury Street, London, W.C.1.
Δ CBS	CBS International, 46, E. 52nd Street, New York 22, N.Y., U.S.A.	Walmore Electronics Ltd., 11-15 Betterton Street, London, W. C. 2.
CDC	Continental Device Corporation, 12515 Chadron Avenue, Hawthorne, California, U. S. A.	
CL	Compagnie de Lampes, 29, Rue de Lisbonne, Paris, 8e. France.	
CLE	Clevite Transistor Products, 200 Smith Street Waltham 54, Massachusetts, U.S.A.	Standard Telephones & Cables Ltd., Components Group, Marketing Division, Footscray, Sidcup, Kent.
Δ CPC	C.P. Clare Transistor Corp., 260, Glen Head Road, Glen House, L.I., New York, U.S.A.	
CRY	Crystalonics, 147 Sherman Street, Cambridge 40, Massachusetts, U.S.A.	G. E. Electronics (London) Ltd., 182/4 Camden Hill Road, London, W. 8.
CSC	Clark Semiconductor Corporation, Walnut Avenue, Clark 2, New Jersey.	Walmore Electronics, 11-15 Betterton Avenue, London, W.C.2.

FIV	Fivre, Via Guesalla 2, Milana, Italy.	
FUJ	Fujitsu Ltd., No. 1015, Kamikodanaka, Kawasaki City, Kanagawa, Prefecture, Japan.	
GE	International General Electric Co., 150 East 42nd Street, New York 17, N.Y., U.S.A.	International General Electric Co. of N.Y., Lincoln House, 296-302 High Holborn, London, W. C.1.
GEC	General Electric Co., Ltd., School Street, Hazel Grove, Stockport, Cheshire, England.	
GEM	Great Eastern Mfg., Co., 163 Rensen Avenue, Brooklyn 12, N.Y., U.S.A.	
GI	General Instrument International Corp., Semiconductor Products Group, 600 West John Street, Hicksville, L.I., New York, U.S.A.	Bay & Co. U.K. Ltd., 343-345 Euston Road, London, N.W.1.
HA	Hughes Aircraft Co., Microelectronics Div., P.O.Box 278 Newport Beach, California.	Hughes International, Heath Row House, Bath Road, Cranford, Middlesex.
HIT	Hitachi Limited, Electronic Device & Component Division, New Marunouchi Building, 4, 1-Chome, Marunouchi, Chiyoda-ku, Tokyo, Japan.	Ataka & Co. (London) Ltd., 61 Cheapside, London, E.C.2.
Δ HIV	Hivac Limited, Stonefield Way, South Ruislip, Middlesex, England.	
HOF	Hoffman Semiconductor Division, 1001, Arden Drive, El Monte, California, U.S.A.	Thorn Electrical Industries Ltd., 105-109 Judd Street, London, W.C.1.

ME	Advanced Micro-Electronics Inc., Cranston 10, 99 Bald Hill Road, Rhode Island, New York, U.S.A.	
MFD	Microfarad, 18-20 Via Derhanino, Milan, Italy.	
Δ MH	Minneapolis-Honeywell Semicon. Products, Minneapolis 8, Minnesota, U. S. A.	Honeywell Controls Ltd., Ruislip Road East, Greenford, Middx.
MIT	Mitsubishi Electric Mfg.,Co., C/o Tokyo Buildings, 2-3 Manunouchi, Chicyodaku, Tokyo, Japan.	
MR	Motorola Semiconductor Products, 5005 East Mc Dowell Road Phoenix, Arizona, U.S.A.	Motorola Semiconductor Products Inc., York House, Empire Way, Wembley, Middlesex.
Δ MSD	Micro Wave & Semiconductor Devices Ltd., Skimpot Trading Estate, Luton, Beds., England.	
MULL	Mullard Limited, Torrington Place, London, W.C.1, England.	
NAT	National Semiconductor Corp., P. O. Box 443, Danbury, Conn., U.S.A.	Scientific Furnishings Ltd., Poynton, Cheshire.
NEC	Nippon Electric Co.,Ltd., 1753 Shimonumabe, Kawasaki City, Japan.	
NM	Newmarket Transistors Ltd., Exning Road, Newmarket, Suffolk, England.	

ABBREVIATIONS USED FOR MANUFACTURERS' NAMES

CODE	MANUFACTURER	AGENT OR SUBSIDIARY IN THE U.K.
ADA	Ad. Auriema Inc., 89, Broad Street, New York 4, N.Y., U.S.A.	Ad. Auriema Ltd., 125 Gunnersbury Lane, Acton, W. C. 3.
Δ ADV	Advanced Research Associates, Box 68, Kensington, Maryland, U.S.A.	
AEG	Allgemeine Elektrizitäts-Gesellschaft, Schuetzenstrasse 30, 4785 Belecke (Mochne) Germany.	Welmec Corp., Ltd., 147/8 Strand, London, W.C.2.
AEI	Associated Electrical Industries Ltd., Electronic Apparatus Division, Carholme Road, Lincoln, England.	
AM	Amelco, Inc., Electron Devices Division, 1300 Terra Bella Avenue, Mountain View, California, U.S.A.	Lectropon Ltd., Kinbex House, Wellington Street, Slough, Buckinghamshire.
AMF	American Machine & Foundry - Semicon Dept., Ieland Division, P.O.Box 128, Vandalia, Ohio.	AMF Ltd., 25-28 Old Burlington Street London, W.1.
AMP	Amperex Electronic Corp., Semiconductor & Receiving Tube Division. Slatersville Rhode Island, N.Y., U.S.A.	
Δ AT	Associated Transistors Ltd., Stonefield Way, South Ruislip, Middlesex, England.	
ATE	Aziende Tecniche Elettroniche Del Sud, S.p.A., Via Tempesta, 2 Milan, Italy,	G. E. Electronics (London) Ltd., 182/4 Camden Hill Road, London, W. 8.
BC	Brush Crystal Co., Ltd., Hythe, Southampton, England.	

RHE	Rheem Semiconductor Corp., 327 Moffett Boulevard, Mountain View, California, U.S.A.	Dage (Great Britain)Ltd., La Casita, Heronsgate, Rickmansworth, Herts.
MLD	Rauland Corp., 4245 North Knox Ave., Chicago 41.	United Mercantile Co. Ltd., 13-14 Queen Street, Mayfair, London.W.1.
ROS	Dr. Ing. Rudolph Rost, Ubbenstrasse 21, Hanover 1, W. Germany.	
RO	Rogers Electronic Tubes, 116 Vanderhoof Avenue, Toronto 17, Ontario, Canada.	
RS	Radiospares Ltd., P.O. Box 268, 4-8 Maple Street, London W. 1.	
SC	Semiconductors Ltd., Cheney Manor, Swindon, Wilts., England.	
Δ SE	Secoa Electronic Corp., 1250 Shames Drive, Westbury, L.I., New York, U.S.A.	
SEC	Sanyo Electric Trading Co.,Ltd., Moriguchi, Osaka, Japan.	
SEM	Shindengen Electric Mfg. Co. Ltd., No. 4, 2 Chome, Otemachi, Chiyodaku, Tokyo, Japan.	
SES	Societe Europeene des Semiconducteurs, (SESCO), 41 Rue de l'Amiral-Mouchez, Paris 13e, France.	MCP Electronics Ltd., Station Wharf Works, Alperton, Middlesex.

CSF	Compagnie Generale des Semi-Conducteurs(COSEM) 12 Rue de la Republique, Puteaux Seine, France.	CSF United Kingdom Ltd., 1 Cadogan Place, London, S. W. 1.
DEL	Delco Radio Division, General Motors Corp., Kokomo, Indiana, U.S.A.	AC-Delco, Dunstable, Bedford.
EBA	Ebauches SA Dpt.Semiconducteurs, FBG Hopital 1, Neuchatel, Switzerland.	
\ EE	English Electric Ltd., Chelmsford, Essex, England.	
ELE	Electromation Co., 4254 Glencoe Avenue, Venice, California, U.S.A.	
Δ ES	Siemens Edison Swan Ltd., 155 Charing Cross Road, London, W. C. 2. England.	
ETC	Electronic Transistor Corp., 153013 Northern Blvd., Flushing, 54. N.J., U.S.A.	
FAN	Fanon Transistor Corp., 439 Frelinghuysen Avenue, Newark 14, New Jersey, U.S.A.	
FC	Fairchild Semiconductor Corp., 313 Fairchild Drive, Mountain View, California, U.S.A.	S.G.S.Fairchild Ltd., Stonefield Way, South Ruislip, Middx., England.
FER	Ferranti Ltd., Gem Mill, Chadderton, Nr. Oldham, Lancs. England.	

CODE MANUFACTURER**AGENT OR SUBSIDIARY IN THE U.K.**

I	ST	Sylvania-Thorn, Great Cambridge Road, Enfield, Middlesex.	
I	STC	Standard Telephones & Cables Ltd., Footscray, Sidcup, Kent. England.	
R	STCA	Standard Telephones & Cables (Pty) Ltd., P. O. Box 525, Sydney, Australia.	Standard Telephones & Cables Ltd., Footscray, Sidcup, Kent.
R	SYL	Sylvania Semiconductor Div., 100, Sylvan Road, Woburn, Mass., U.S.A.	
R	TAD	(Tadiran), Israel Electronics Industries Ltd., 3 Derech Hashalom, P.O.Box 648 Tel-Aviv, Israel.	
St			
	TAG	Transistor A.G., Hohlstrasse 610, Zurich 9. Switzerland.	
Δ SE			
	TEI	Thorn Electrical Industries, 155 Charing Cross Road, London, W. C. 2.	
SE			
	TFN	Telefunken AG. BRH/EX, Postfach 837, Solflinger Str, 100 Ulm/Donau, Germany.	Britimpex Ltd., 16 Great Russell Street, London, W. C. 1.
SE			
	TH	Compagnie Francaise Thomson Houston, 173 Boulevard Haussman, Paris 8e, France.	Mining & Chemical Products, Station Wharf, Alperton, Middlesex.
SE	TII	Texas Instruments Incorp., Semiconductor-Components Div., P.O.Box. 5012. Dallas, Texas, U.S.A.	Texas Instruments Ltd., Manton Lane, Bedford.

CODE MANUFACTURER**AGENT OR SUBSIDIARY IN THE U.K.**

IND	Industro Transistor Corp., 35-10, 36th Avenue, Long Island City 6, New York, U.S.A.	
INT	Intermetall, Hans-Bunte-Strasse 19, Freiberg i Br., Germany.	Standard Telephones & Cables Ltd., Semiconductor Division (Transistors) Footscray, Sicup, Kent.
IR	International Rectifiers Corp., El Segundo, California.	International Rectifier Co. (Gt. Britain)Ltd. Hurst Green, Oxted, Surrey.
JL	Joseph Lucas (Electrical) Ltd., Mere Green Road, Four Oaks, Sutton Coldfield, Warwickshire. England.	Joseph Lucas (Electrical)Ltd., 343-345 Ellston Road, London, N.W.1.
KO	Kobe Kogyo Corp., Hyogo-ku, Kobe, Japan.	
KSC	Kearfott Semiconductor Corp., 437 Cherry Street, West Newton, Mass., U.S.A.	
Δ LCT	Laboratoire Central de Telecommunications, 46 Avenue de Breteuil. Paris 7e, France.	
LT	Lignes Telegraphiques et Telephoniques, 89 Rue de la Faisanderie, Paris 16, France.	
MAT	Matsushita Electronics Corp., 300, Oaza Nishiozumi, Takatsuki, Osaka, Japan.	
MB	MBLE 80 Rue des deux Gares, Bruxelles 7 Belgium.	

CODE MANUFACTURER**AGENT OR SUBSIDIARY IN THE U.K.**

NOR	Northern Electric Co., Ltd., 1134 St. Catherine Street West, Montreal, Quebec, Canada.	
NP	Nucleonic Products, 3133 East 12th Street, Los Angeles 23. California, U.S.A.	
PCL	Photain Controls Ltd., Randells Road, Leatherhead, Surrey.	
A PCO	Philco Corp., Landsdale Div., Church Road, Pennsylvania, U.S.A.	J. H. Thorpe(Worcester)Ltd., 3 Foregate Street, Worcester.
PHIL	Philips Gloeilampenfabrieken, Eindhoven, Netherlands.	Mullard Limited, Torrington Place, London, W.C.1.
PSI	TRW Semiconductors Inc., (Formerly Pacific Semiconductors Inc.,) 10451 West Jefferson Blvd., Culver City, California, U.S.A.	Mining & Chemical Products, Station Wharf, Alpertton, Middlesex.
RAD	La Radiotechnique, Div. Tubes Electroniques, 130 Ave., Ledru Rollin, Paris 11e, France.	
RAY	Raytheon Co., 350 Ellis Street, Mountain View, California, U. S. A.	B. & K. Laboratories Ltd., 4 Tilney Street, Park Lane, London, W.1.
RCA	Radio Corp. of America, Electronic Components & Devices, Somerville, New Jersey, U. S. A.	R.C.A. (Gt.Britain) Ltd., Lincoln Way, Sunbury-on-Thames, Middlesex.
RFT	Veb Halbleiterwerk, Potsdamer Strasse 1-2, Frankfurt,	

CODE MANUFACTURER**AGENT OR SUBSIDIARY IN THE U.K.**

SGS	SGS - Fairchild, Societa Generale Semiconduttori, Via C. Olivetti 1, Agrate, Milan, Italy.	S.G.S. Fairchild Ltd., Stonefield Way, Ruislip, Middlesex.
SH	Siemens & Halske A.G., Balanstrasse 73, Munich 8, W. Germany.	R. H. Cole (Overseas) Ltd., 2, Caxton Street, London, S. W. 1.
SII	Siliconix Incorporated, 1140 West Evelyn Avenue, Sunnyvale, California, U.S.A.	Walmore Electronics Ltd., 11-15 Betterton Street, Drury Lane, London. W. C. 2.
SIL	Silicon Transistor Corp., East Gate Blvd., Garden City, Long Island, New York, U.S.A.	
SO	Sony Corp., 351, Kitashinagawa-6, Shinagawa-ku, Tokyo, Japan.	
SOL	Solitron Devices, Inc. 1177 Blue Heron Blvd., Riviera Beach, Florida.	Dynamco Systems Ltd., IERC Division, Govett Avenue, Shepperton, Middlesex.
SP	Sperry Semiconductors Div., Sperry Rand Corp., 380 Main Street, South Norwalk, Connecticut, U.S.A.	Roberts Electronics Ltd., 17 Hermitage Road, Hitchin, Herts.
SPR	Sprague Electric Co., North Adams, Massachusetts, U. S. A.	Sprague Electric (U.K.)Ltd., Coldharbour House, 126, Coldharbour Lane, Hayes, Middlesex.
SSE	Solid State Electronics Corp., 15321 Rayen Street, Sepulveda, California, U. S. A.	
SSP	Solid State Products, 1 Pingree Street, Salem, Massachusetts, U.S.A.	

TIF	Texas Instruments France, Villeneuve-Loubet (A.M.) France.	
TK	Suddeutsche Telefon-Apparate Kabel-und Drahtwerke A.G., Nurnberg 2, W. Germany.	
TOS	Tokyo Shibaura Electric Co., 1, Komukaitoshiba Cho., Kawasaki, Japan.	Mitsui & Co., Bucklersbury House, 83 Cannon Street, London, E.C.4.
TS	Tung Sol Electric, 545 N. Arlington Avenue, East Orange, New Jersey, U.S.A.	Walmore Electronics Ltd., 11-15 Betterton Street, Drury Lane, London, W.C.2.
TT	Transitron Electronic Corp., 168 Albion Street, Wakefield, Mass., U.S.A.	Transistor Electronic Products Ltd., Gardiner Road, Maidenhead, Berks.
TUN	(Tungsram) United Incandescent Lamp & Electrical Co.,Ltd., Ujpest 4, Hungary.	
TYC	Tyco Semiconductors Corp., Bear Hill, Waltham 54. Massachusetts.	
UST	U.S. Transistor Corp., 149, Eileen Way, Syosset, Long Island, New York, U.S.A.	Compronex Ltd., 15, Old Bond Street, London, W.1.
VAL	Valvo GmbH, Monckebergstrasse 7, Hamburg 1, W. Germany.	Mullard Ltd., Mullard House, Torrington Place, London, W.C.1.
VH	Van der Heem, N.V., Maanweg 156, Postbus 1060, Den Haag, Netherlands.	
WE	Western Electric Co., 120 Broadway, New York 5, New York, U.S.A.	

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{CO}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
03K3	SP	NPN					2	2	40†		
2C111	SGS	NPN	102	5	10nA		5	0.1		40†	
2C415	SGS	NPN	102				5	1	150†		
2C425	SGS	NPN	102				5	1		60	
2G101	TIL	PNP	13				6	2		20	
2G101	SGS	PNP	13				1	20		80†	
2G102	TIL	PNP	13				6	2		20	
2G102	SGS	PNP	13				1	20		110†	
2G103	TIL	PNP	13				0.5	10	25†	40†	
2G104	TIL	PNP	13				0.3	10	25†	40†	
2G106	TIL	PNP	17	7	5mA		0.2	10	30†		150†
2G108	SGS	PNP	13				1	20		60†	
2G109	SGS	PNP	13				1	20		95†	
2G110	TIL	PNP	13				6	2	8	20	25
2G138	SGS	PNP	13				1	20		30†	
2G139	SGS	PNP	13				1	20		60†	
2G140	SGS	PNP	13				1	20		30†	
2G141	SGS	PNP	13				1	20		60†	
2G201	SGS	PNP	13				1	20		25†	
2G202	SGS	PNP	13				1	20		40†	
2G220	TIL	PNP	16				1.5	100		35†	
2G221	TIL	PNP	16				1.5	100		35	
2G222	TIL	PNP	16				1.5	100		35†	
2G223	TIL	PNP	16				1.5	100		40	
2G224	TIL	PNP	16				1.5	100		40	
2G225	TIL	PNP	16				1.5	100		40	
2G226	TIL	PNP	16				1.5	100		53†	
2G227	TIL	PNP	16				1.5	100		53†	
2G228	TIL	PNP	16				1.5	100		53†	
2G229	TIL	PNP	16				1.5	100		53†	
2G230	TIL	PNP	16				1.5	100		53†	
2G231	TIL	PNP	16				1.5	100		53†	
2G240	TIL	PNP	16				2	500		70†	
2G270	SGS	PNP	13				1	20		40†	
2G271	SGS	PNP	13				1	20		80†	
2G301	SGS	PNP	13				1	20		30	
2G301	TIL	PNP	13				6	1	30	60	
2G302	SGS	PNP	13				1	20		60	
2G302	TIL	PNP	13				6	1	45	130	
2G303	TIL	PNP	13				6	1	30	60	
2G304	TIL	PNP	13				6	1	45	130	
2G306	TIL	PNP	13				6	1	90	160	
2G308	TIL	PNP	13				6	1	45		
2G309	TIL	PNP	13				6	1	170		
2G319	SGS	PNP	13				1	20		34†	
2G320	SGS	PNP	13				1	20		50†	
2G321	SGS	PNP	13				1	20		80†	
2G322	SGS	PNP	13				1	20		45†	
2G323	SGS	PNP	13				1	20		68	
2G324	SGS	PNP	13				1	20		85†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR	
Vce	Ic mA	db	Vce	Ic mA	Pc mW			
5	10μA	5	8	10	100		03K3	
			12		250		2C111	
			35		250		2C415	
			60		340		2C425	
			15	10	60		2G101	
			15*	100	140		2G101	
				15	10	60		2G102
			15*	100	140		2G102	
				50	300		2G103	
				50	150		2G104	
			7	100	150		2G106	
				100	140		2G108	
				400	140		2G109	
			15	50	250		2G110	
				200	200		2G138	
				200	200		2G139	
				200	200		2G140	
				200	200		2G141	
				100	140		2G201	
				100	140		2G202	
				40	10A	80.0W†		2G220
				60	10A	80.0W†		2G221
				80	10A	80.0W†		2G222
				40	15A	80.0W†		2G223
				60	15A	80.0W†		2G224
				80	15A	80.0W†		2G225
				40	20A	80.0W†		2G226
				60	20A	80.0W†		2G227
				80	20A	80.0W†		2G228
				40	25A	80.0W†		2G229
				60	25A	80.0W†		2G230
				80	25A	80.0W†		2G231
				80	3A	15.0W†		2G240
			15*		200	225	2G270	
			15*		200	225	2G271	
				10	200	150	2G301	
				15	50	75	2G301	
				10	200	150	2G302	
				15	50	75	2G302	
				15	100	75	2G303	
				15	100	75	2G304	
				15	200	75	2G306	
2	0.5	2.5	20	100	200		2G308	
2	0.5	2.5	20	100	200		2G309	
5	1	6		200	225		2G319	
6	1	6		200	225		2G320	
5	1	6		200	225		2G321	
5	1	6		100	140		2G322	
5	1	6		100	140		2G323	
5	1	6		100	140		2G324	

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2G345	TIL	PNP	13				6	1	15†		
2G371	TIL	PNP	13				6	1	30		135
2G374	TIL	PNP	13				6	1	70		275
2G377	TIL	PNP	13				1	100		70†	
2G381	TIL	PNP	13				1	50	50†	160†	220†
2G382	TIL	PNP	13				1	50	50†	160†	220†
2G383	TIL	PNP	17				1	50	40†		150†
2G384	TIL	PNP	17				1	50	55†		140†
2G385	TIL	PNP	17				1	50	100†		270†
2G386	TIL	PNP	17				1	50	55†		140†
2G387	TIL	PNP	17				1	50	100†		270†
2G394	SGS	PNP	13				1	10	20†	70†	
2G395	SGS	PNP	13				5	1	20†	87†	
2G396	SGS	PNP	13				5	1	30†	90†	
2G397	SGS	PNP	13				5	1	40†	90†	
2G398	SGS	PNP					0.35	5		57†	
2G401	TIL	PNP	9				6	1	40†	100†	
2G401	SGS	PNP	13				1	20		30†	
2G402	TIL	PNP	9				6	1	40†	100†	
2G402	SGS	PNP	13				1	20		60†	
2G403	TIL	PNP	17				6	2	40†	100†	
2G414	TIL	PNP	13				6	1	50	130	200
2G415	TIL	PNP	13				6	1	50	130	200
2G416	TIL	PNP	13				6	1	50	130	200
2G417	TIL	PNP	13				6	1	50	130	200
2G508	SGS	PNP	13				1	20		112†	
2G509	FC	PNP	17				5	1		112	
2G524	SGS	PNP	13				1	20		35†	
2G525	SGS	PNP	13				1	20		52†	
2G526	SGS	PNP	13				1	20		73†	
2G527	SGS	PNP	13				1	20		91†	
2G577	SGS	PNP					5	1		59†	
2G601	SGS	PNP	13				1	10	20†		
2G602	SGS	PNP	13				1	10	20†		
2G1024	SGS	PNP	17				5	1	16	30	52
2G1025	SGS	PNP	17				5	1	30	44	80
2G1026	SGS	PNP	17				5	1	44	64	96
2G1027	SGS	PNP	17				5	1	60	87	130
2H1254	HA	PNP	17				10	2		25	
2H1255	HA	PNP	17				10	2		55	
2H1256	HA	PNP	17				10	2		25	
2H1257	HA	PNP	17				10	2		55	
2H1258	HA	PNP	17				10	2		25	
2H1259	HA	PNP	17				10	2		55	
2K361	RAY	PNP	31	3	10	25	1	50	25†	50†	75†
2N18F	FIV	PNP	12								
2N18FA	FIV	PNP	12								
2N19F	FIV	PNP	12								
2N21A	WE	PNP	5								
2N22	WE	PNP(PC)	22								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
2	1	4	15	10	75		2G345
			20	300	200		2G371
2	1	4	20	300	200		2G374
				300	150		2G377
			20	500	250		2G381
			30	500	250		2G382
			30	1A	250		2G383
			25	1A	250		2G384
			25	1A	250		2G385
			20	1A	250		2G386
			20	1A	250		2G387
				200	150		2G394
				200	200		2G395
				200	200		2G396
				200	200		2N397
				100	50		2G398
			20	10	100		2G401
				200	150		2G401
			20	10	100		2G402
				200	150		2G402
			40	25	100		2G403
			20	10	100		2G414
			20	10	100		2G415
			20	10	100		2G416
			20	10	100		2G417
5	1	6		100	140		2G508
				100	150		2G509
				500	225		2G524
				500	225		2G525
				500	225		2G526
				500	225		2G527
				200	225		2G577
				200	150		2G601
				200	150		2G602
			40	500	225		2G1024
			40	500	225		2G1025
			40	500	225		2G1026
			40	500	225		2G1027
			30		300		2H1254
			30		300		2H1255
			40		300		2H1256
			40		300		2H1257
			30		300		2H1258
			50		300		2H1259
			30	200			2K361
					300		2N18F
					90		2N18FA
					35		2N19F
				40	120		2N21A
			40	21	145		2N22

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N23	WE	PNP(PC)	58								
2N24	WE	PNP(PC)	22								
2N25	WE	PNP(PC)	22								
2N26	WE	PNP(PC)	58								
2N27	WE CBS	NPN									
2N28	WE CBS	NPN									
2N29	WE CBS	NPN					4.5	1		49	
2N30	GE	PNP(PC)	59								
2N32	SYL	PNP(PC)	5				25	5		2.2	
2N33	RCA TP	PNP(PC)	5					50 μ A		40	
2N34	SYL GEM RCA ETC	PNP	5				6	1	25	75	125
2N34A	ETC	PNP						1	25		125
2N35	SYL GEM RCA ETC CBS	NPN	5				6	1	25	75	125
2N35/5	SYL	NPN	13				6	1	25	75	125
2N36	CES ETC	PNP	5				6	1		45	
2N37	CBS ETC	PNP	5				6	1		30	
2N38	CBS ETC	PNP	5				6	1		15	
2N38A	CBS	PNP					6	1		15	
2N41	RCA	PNP					6	1		40	
2N43	ETC GE TH GT CL FIV	PNP	11				5	1	30	42	66
2N43A	ETC GE GI TH	PNP	11				5	1	32	43	70
2N44	ETC FIV GE TH CL	PNP	11				5	1	17	25	32
2N44A	GE GI ETC	PNP	11				4.5	1		31	
2N45	ETC GI CL FIV TH GE	PNP	11				4.5	1	9	12	16
2N46	RCA	PNP					6	1		40	
2N47	PCC	PNP	21				10			40	
2N48	PCO	PNP	10							33	
2N49	PCC	PNP	10							40	
2N50	CLE TP	PNP(PC)	22								
2N51	CLE TP	PNP(PC)									
2N52	CLE TP	PNP(PC)	22								
2N53	CLE	PNP(PC)	22								
2N54	WES	PNP	60							33	
2N55	WES	PNP	60							18	
2N56	WES	PNP	60							12	
2N57	MH CBS	PNP	26								
2N59	WES ETC	PNP	13				10.5	100	45†	90†	135†
2N59A	WES ETC	PNP	13				10.5	100	45†	90†	135†
2N59B	WES ETC	PNP	13				10.5	100	45†	90†	135†
2N59C	WES ETC	PNP	13				10.5	100	45†	90†	135†
2N6C	WES	PNP	13				10.5	100	35†	65†	105†
2N60A	WES	PNP	13				10.5	100	35†	65†	105†
2N60B	WES	PNP	13				10.5	100	35†	65†	105†
2N6CC	WES	PNP	13				10.5	100	35†	65†	105†
2N61	WES	PNP	15				10.5	100	25†	45†	75†
2N61A	WES	PNP	15				10.5	100	25†	45†	75†
2N61B	WES	PNP	15				10.5	100	25†	45†	75†
2N61C	WES	PNP	15				10.5	100	25†	45†	75†
2N62	PCO	PNP	60								
2N63	TS ETC	PNP	5				6	1	18	25	32

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	40	105		2N23
			20	20	145		2N24
			20	30	200		2N25
			40	40	90		2N26
				100	50		2N27
				100	50		2N28
				100	120		2N29
				7	100		2N30
			40	8	50		2N32
			8	7	30		2N33
6	1	18	25	8	50		2N34
			25	8	50		2N34A
6	1	16	25	100	50		2N35
				100	150		2N35/5
		40*	20	8	50		2N36
		36*	20	8	50		2N37
		32*	20	8	50		2N38
			20	8	50		2N38A
			25	15	50		2N41
5	1	6	30	50	150		2N43
5	1	6	30	300	240		2N43A
5	1	6	30	50	150		2N44
				50	155		2N44A
1.5	0.5	22		50	150		2N45
			25	15	50		2N46
		25*		20	50		2N47
		25*		20	50		2N48
		15*		20	50		2N49
			50	8	100		2N50
				8	100		2N51
				8	100		2N52
				8	100		2N53
				10	200		2N54
				10	200		2N55
				10	200		2N56
				800	20.0W†		2N57
			20	200	180		2N59
			20	200	180		2N59A
			20	200	180		2N59B
			20	200	180		2N59C
			20	200	180		2N60
			20	200	180		2N60A
			20	200	180		2N60B
			20	200	180		2N60C
			20	200	180		2N61
				200	180		2N61A
			20	200	180		2N61B
			20	200	180		2N61C
				20	50		2N62
6	1	25*	25	25	100		2N63

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N64	TS ETC	PNP	5				6	1	32	47	75
2N65	TS	PNP	5				6	1	75	100	200
2N66	WE	PNP					4.5	100	25†		
2N67	WE	PNP(PC)									
2N68	SYL GEM CBS	PNP	32				1.5	500	10†	40†	
2N68/13	KSC	PNP	27					0.5	15†		
2N71	WES	PNP	61								
2N73	WES	PNP	60								
2N74	WES	PNP	60								
2N75	WES	PNP	60								
2N76	TH	PNP	11				5	1	9	18	80
2N77	RCA ADA ETC	PNP	13				4	0.7		55	
2N78	GE ETC	NPN	11				5	1	33	55	200
2N78A	GE ETC	NPN	11				1	1	45†	70†	135†
2N79	RCA	PNP	3							46	
2N80	CBS	PNP	1				6	1		80	
2N81	GE	PNP					6	1	20		
2N82	CBS	PNP					6	1	20		
2N83	CBS	PNP	11				1.5	500	8†		
2N94	SYL GEM ETC CBS	NPN	5				6	1	5		15
2N94A	SYL GEM ETC CBS	NPN	5				6	1	19	49	
2N95	SYL GEM CBS	NPN	32				6	0.5		40	
2N97	GPC BO ETC CBS	NPN	5				4.5	1	5.5	13	18
2N97A	GPC CBS	NPN	5				4.5	1	5	14	18
2N98	GPC BO ETC CBS	NPN	5				4.5	1	18	40	99
2N98A	GPC CBS	NPN	5				4.5	1	18	40	99
2N99	GPC ETC CBS	NPN	5						20	40	60
2N100	GPC BO CBS	NPN	5				4.5	1	100	145	
2N101	SYL GEM CBS	PNP	32				1.5	500	10†	40†	
2N101/13	SYL KSC	PNP	27				2	500		20†	
2N102	SYL CBS	NPN	1				1.5	500	10†	40†	
2N102/13	SYL KSC	NPN	17				1.5	500	10†		
2N103	GPC BO ETC	NPN	5				4.5	1	1.5	4	5.5
2N104	RCA ADA ETC	PNP	11				6	1	25	44	75
2N105	RCA ADA ETC	PNP					4	0.7	25	55	75
2N106	ETC	PNP	5				1.5	0.5		45	
2N107	GE ETC	PNP	1				1	1	15	20	
2N108	CBS	PNP									
2N109	ETC RCA SYL ADA	PNP	11				1	50	50†	75†	150†
2N110	WE	PNP(PC)	5							140	
2N111	RAY ETC	PNP	5					1	15	25	45
2N111A	RAY ETC	PNP	5					1	15	25	45
2N112	RAY ETC	PNP	5				6	1		40	
2N112A	RAY ETC	PNP	5					1	15	30	45
2N113	ETC RAY RCA	PNP	5				6	1		45	
2N114	RAY ETC	PNP	5				6	1	35	75	105
2N115	AMP	PNP					14			40	
2N117	TII TT	NPN	5				5	1	9	15	20
2N118	TII TT	NPN	5				5	1	18	29	40
2N118A	TII TT	NPN	5				5	1	18	54	90

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
6	1	22*	25	25	100		2N64
6	1	20*	25	25	100		2N65
			40	800	5.0W†		2N66
				50	100		2N67
			15	1.5A	2.0W		2N68
			15	3A	20.0W†		2N68/13
			50	250	1.0W		2N71
			50		200		2N73
			50		200		2N74
			50	15	200		2N75
				10	50		2N76
4.5	0.7	6.5		15	35		2N77
1.5	0.5	12	15	25	65		2N78
			20	20	65		2N78A
5	1	10		50	35		2N79
				850	50		2N80
		25		15	50		2N81
				15	35		2N82
				2A			2N83
6	1	15	20	50	50		2N94
6	1	15	20	50	50		2N94A
			15	1.5A	2.0W		2N95
4.5	1	20	30	10	50		2N97
			15	10	50		2N97A
4.5	1	20	40	10	50		2N98
				10	50		2N98A
		15			50		2N99
4.5	1	20	25	5	25		2N100
			15	1.5A	1.0W		2N101
			30	1.5A	4.0W†		2N101/13
			15	1.5A	1.0W		2N102
			30	1.5A	4.0W†		2N102/13
4.5	1	22	35	10	50		2N103
4.5	0.7	6.5	30	50	150		2N104
1.5	0.3	7.5	25	15	35		2N105
			6	10	100		2N106
		22	6	10	50		2N107
				15	50		2N108
			25	70	150		2N109
				50	200		2N110
			25	15	200		2N111
			15	200	150		2N111A
		25*	6	5			2N112
			15	200			2N112A
			10	200	100		2N113
2.5	0.5	10	15	25	150		2N114
			32	1.5A			2N115
5	1	20		25	150		2N117
5	1	20		25	150		2N118
5	1	25		25	150		2N118A

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N119	TII TT	NPN	5				5	1	36	63	90
2N120	TII TT	NPN	5				5	1	76	140	333
2N122	TII	NPN	129				35	100	3†		
2N123	GE SYL IND ETC	PNP	11		600		5	1	30	90	150
2N123/5	SYL	PNP	17				1	50		75	
2N124	TII ETC CBS	NPN	5					5	12†		40†
2N125	TII ETC CBS	NPN	5					5	24†		75†
2N126	TII ETC CBS	NPN	5					5	48†		150†
2N127	TII CBS	NPN	5				6	5	100†		200
2N128	PCO SC	PNP	10				3	0.5	19	33	
2N129	PCO SC	PNP	24				3	0.5		21	
2N130	ETC RAY	PNP	48				6	1	12	22	40
2N130A	MR RAY ETC	PNP	1				6	1	15	22	45
2N131	RAY ETC	PNP	48				6	1	25	45	75
2N131A	ETC	PNP					6	1	25	45	75
2N132	RAY ETC	PNP	48				6	1	45	90	135
2N132A	MR RAY ETC	PNP	1				6	1	45	90	135
2N133	RAY ETC	PNP	48				6	1	25	50	75
2N133A	MR RAY	PNP	1				6	1	25	50	75
2N135	TH CL GE ETC	PNP	11				5	1	10	20	30
2N136	TH CL GE ETC	PNP	11				5	1	20	40	60
2N137	TH CL GE ETC	PNP	11				5	1	30	60	90
2N138	RAY	PNP	48				6	1		140	
2N138A	RAY	PNP	48				6	1		140	
2N139	RCA GEM SYL ADA	PNP	11				9	1	24	48	72
2N140	SYL RCA ADA	PNP	11				9	0.6		48	
2N141	SYL	PNP	32				6	250	10†	40†	
2N141/13	KSC	PNP	27				2	500	25†		
2N142	SYL	NPN	32				6	250	10†	40†	
2N143	SYL CBS	PNP	32				6	250	10†	40†	
2N143/13	KSC	PNP	27				6	250	10†		
2N144	SYL CBS	NPN	32				6	250	10†	40†	
2N144/13	SYL KSC	NPN	27				4.5	250	10.5		
2N145	TII ETC CBS	NPN	5					1	30†		90†
2N146	TII ETC CBS	NPN	5					1	20†		60†
2N147	TII ETC CBS	NPN	5					1	35		105
2N148	TII CBS	NPN	5								
2N148A	TII CBS	NPN	5								
2N149	TII CBS	NPN	5								
2N149A	TII CBS	NPN	5								
2N150	TII CBS	NPN	5								
2N150A	TII CBS	NPN	5								
Δ2N155	CBS NP SYL CLE PEN	PNP	16				12	500	24†	40†	
Δ2N156	CBS SYL KSC RAY	PNP	21				12	150	24†	40†	
2N157	CBS	PNP	16				3	500	20†		
Δ2N157A	CBS	PNP	16				3	500	20†		
Δ2N158	CBS KSC RAY	PNP	21				24	50	21†	36†	
Δ2N158A	CBS KSC RAY	PNP	21				24	180	40		
2N159	SPR	PNP(PC)	5								
2N160	BO	NPN	5				5	1	*9	15	18

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	1	20		25	150		2N119
5	1	25		25	15		2N120
				140	8.7W†		2N122
			15	125	100		2N123
				125	100		2N123/5
		7		8	50		2N124
		7		8	50		2N125
		7		8	50		2N126
		7		8	50		2N127
3	0.5	10	4.5	5	25		2N128
		20*	4.5	5	30		2N129
		25*	22	10	85		2N130
6	1	12	40	100	100		2N130A
		22*	15	10	85		2N131
6	1	12	30	100	100		2N131A
		20*	12	10	85		2N132
6	1	12	20	100	100		2N132A
		6*	15	10	85		2N133
6	1	6*	20	100	100		2N133A
			12	50	100		2N135
			12	50	100		2N136
			6	50	100		2N137
				20	50		2N138
9	0.5	4.5	16	15	35		2N138A
							2N139
			12	15	35		2N140
			60	800	1.5W		2N141
			60	3A	20.0W†		2N141/13
			60	800	1.5W		2N142
			60	800	1.0W		2N143
			60	800	4.0W†		2N143/13
			60	800	1.0W		2N144
			60	800	4.0W†		2N144/13
			20	5	65		2N145
			20	5	65		2N146
			20	5	65		2N147
			16	5	65		2N148
			32	5	65		2N148A
			16	5	65		2N149
			32	5	65		2N149A
			16	5	65		2N150
			32	5	65		2N150A
			30	3A	1.5W		2N155
			30	3A	1.5W		2N156
			60	3A	8.5W		2N157
			90	3A	8.5W		2N157A
			60	3A	1.5W		2N158
			80	3A	20.0W†		2N158A
				10	80		2N159
5	1	25	40	25	150		2N160

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N160A	BO	NPN	5				5	1	9	15	18
2N161	BO	NPN	5				5	1	18	25	40
2N161A	BO	NPN	5				5	1	18	25	40
2N162	GPC BO	NPN	5				4.5	1		40	
2N162A	GPC BO	NPN	5				4.5	1		40	
2N163	BO	NPN	5				5	1	40	100	
2N163A	BO	NPN	5				5	1	40	100	
2N164A	ETC CBS	NPN	17				5	1		40	
2N165	ETC CBS	NPN	17				5	1		72	
2N166	GE ETC CBS	NPN	13				1	16	32	48	
2N167	GE ETC CBS	NPN	12				5	1	20	65	200
2N167A	GE	NPN	12				5	1	20	65	200
2N168	GE FIV ETC CBS	NPN	12				1		20		
2N168A	SYL FIV GE CBS	NPN	12				5	1	23		135
2N169	GE FIV ETC CBS	NPN	12				4.5	1	36	50	
2N169A	SYL GE ETC CBS	NPN	12				4.5	1		35	50
2N170	GE ETC CBS	NPN	12				5	1	15	20	45
2N172	TII CBS	NPN	5								
2N173	DEL CBS MR TS TII	PNP	25				2	5A	35†		70†
2N174	TII DEL CBS TH TS	PNP	25				2	5A	25†		50†
2N174A	DEL TS TH	PNP	25				2	1.2A	40†		80†
2N175	ADA RCA ETC	PNP	11				4	1	35	65	105
2N176	DEL RCA SYL MR CBS	PNP	16				2	500	25†		90†
2N178	MR CBS	PNP	16				3	500	15†		45†
2N179	MR CBS	PNP	16								
2N180	CBS ETC	PNP	1	10	300 μ A		6	1	30	60	90
2N181	CBS ETC	PNP	1	10	300 μ A		6	1	30	60	90
2N182	CBS ETC	PNP	1				6	1	30	60	90
2N183	CBS ETC	NPN	1				6	1	25	40	75
2N184	CBS ETC	NPN	1				6	1	50	60	150
2N185	TII STCA ETC	PNP	5				10.5	100	30†	55†	105†
2N186	TH GE ETC	PNP	11				4.5	1		24	
2N186A	TH GE ETC	PNP	11				4.5	1		24	
2N187	TH ETC	PNP	11				4.5	1		36	
2N187A	TH GE ETC	PNP	13				4.5	1		36	
2N188	TH ETC	PNP	11				1	150		54†	
2N188A	TH GE ETC	PNP	13				1	150		54†	
2N189	TH GE ETC	PNP	11				55	1		24	
2N190	TH GE ETC	PNP	11				5	1		36	
2N191	TH GE ETC	PNP	11				5	1		54	
2N192	TH GE ETC	PNP	11				5	1		75	
2N193	SYL ETC	NPN	5				6	1	4	7.5	15
2N194	SYL ETC	NPN	5				6	1	5	8	15
2N194A	SYL ETC	NPN	5				6	1	5	8	15
2N206	RCA ETC	PNP	13				4.5	1	25	47	75
2N207	PCO SC ETC	PNP	10				5	1	35	100	150
2N207A	PCO SC ETC	PNP	10				5	1	35	100	150
2N207B	PCO SC ETC	PNP	10				5	1	35	100	150
2N211	SYL ETC	NPN	5				6	1	5	10	15
2N212	SYL ETC	NPN	5				6	1	7	10	15

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	1	25	30	25	150		2N160A
5	1	25	40	25	150		2N161
5	1	25	40	25	150		2N161A
		25	40	25	150		2N162
		25		25	150		2N162A
5	1	25	40	25	150		2N163
5	1	25	40	25	150		2N163A
				20	65		2N164A
				20	55		2N165
			6	20	25		2N166
			30	75	65		2N167
			30	75	65		2N167A
			15	20	55		2N168
			15	20	65		2N168A
			15	20	65		2N169
1.5	0.5	6	25	20	65		2N169A
			6	20	25		2N170
			16	5	65		2N172
			50	15A	40.0W†		2N173
			50	15A	40.0W†		2N174
4.5	0.5	6*	70	15A	30.0W†		2N174A
			10	2	20		2N175
			30	7A	10.0W†		2N176
			30	3A	10.0W†		2N178
				60			2N179
6	1	12	40	25	150		2N180
6	1	12	40	38	250		2N181
				10	100		2N182
				10	100		2N183
				10	100		2N184
			20	150	150		2N185
			25	200	75		2N186
			25	200	180		2N186A
			25	200	75		2N187
			25	200	180		2N187A
			25	200	75		2N188
			25	200	180		2N188A
5	1	15	25	50	75		2N189
5	1	15	25	50	75		2N190
5	1	15	25	50	75		2N191
5	1	15	25	50	75		2N192
			15	50	50		2N193
6	1	20*	18	100	50		2N194
			18	50	50		2N194A
			30	50	75		2N206
2.5	0.5	5	12	20	50		2N207
2.5	0.5	2	12	20	50		2N207A
2.5	0.5	5*	12	20	50		2N207B
			10	50	50		2N211
			10	50	50		2N212

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N213	SYL ETC CBS	NPN	5				6	1	70	150	500
2N213A	SYL ETC	NPN	5				6	1	100	150	250
2N214	SYL ETC CBS	NPN	5				6	35	50†	75†	100†
2N214A	ETC	NPN	17				1.5	35		100	
2N214MP	GEM	NPN	5				6	35	50†	75†	100†
2N215	RCA ADA HIT ETC	PNP	13				6	1	20	44	60
2N216	SYL ETC	NPN	5				6	1	3.9	7.5	15
2N217	ETC SYL RCA ADA HIT	PNP	13				1.5	50		75	
2N217EQ	AMP	PNP					6	10		70	
2N218	RCA ADA HIT SYL	PNP	13				10.5	1		48	
2N219	RCA ADA HIT	PNP	13				10.5	0.6		75	
2N220	RCA ADA ETC UST	PNP	13				4.5	0.5	35	65	105
2N223	PCO SC ETC	PNP	10				4.5	2	70	110	150
2N224	SC PCO ETC	PNP	10				0.6	100	60†	90†	120†
2N225	SC PCO ETC	PNP	10				0.6	100	60†	90†	120†
2N226	SC PCO	PNP	10				0.6	100	35†	60†	105†
2N227	SC PCO	PNP	10				0.6	100	35†	60†	105†
2N228	SYL ETC CBS	NPN	5				6	1	50		100
2N229	SYL ETC CBS	NPN	5				6	1	25		75
2N230	MAL	PNP					4	500	60†		106†
2N231	PCO SC	PNP(SB)	10				3	0.5	19		66
2N232	PCO SC	PNP(SB)	10				3	0.5	9	20	39
2N233	PCO SC SYL	PNP	5				3	0.5	19	66	
2N233A	SYL ETC	NPN	5				6	1	10†		50†
2N234	BEN	PNP	16								
2N234A	BEN	PNP	16				45	250		40	
2N235	BEN CBS	PNP	16				1	250		40	
2N235A	SYL BEN CLE CBS	PNP	16				5	50		38	
2N235B	BEN GEM CLE SYL CBS	PNP	16				5	50		38	
2N236	BEN SYL CBS	PNP	16				1.5	1A		35†	
2N236A	BEN SYL CBS	PNP	16				5	250		100	
2N236B	SYL BEN CBS	PNP	16		200		4.5	500		80	
2N237	NAT ETC	PNP	5				6	1	50	70	150
2N238	TII ETC	PNP	5					1	30		90
2N240	PCO SC SPR	PNP(SB)	10				3	0.5	16	30	
2N241	TH GE ETC	PNP	11				1	100		73†	
2N241A	TH GE ETC SYL	PNP	13				1	20	50†		125†
2N242	SYL TS BEN CBS	PNP	16				10.5	500	35	50	
2N243	TII	NPN	5				10	5	9	16	32
2N244	TII	NPN	5				10	5	25	33	90
2N247	CBS SYL RCA ADA	PNP	3				10.5	1	20	60	175
2N247/33	SYL	PNP					9	1		60	
2N248	TII	PNP	5				9	0.5		20†	
2N249	TII ETC	PNP	13					100	30†		90†
2N250	SYL CLE TII STCA	PNP	16				2	500	30†	50†	
2N250A	TII	PNP	16				1.5	500	35†		
2N251	TII	PNP	16				1.5	500	30†	50†	
2N251A	TIL	PNP	16				1.5	500	35†		
2N252	TII STCA ETC	PNP	5							30	
2N253	TII	PNP	5							10	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			25	100	50		2N213
			25	100	125		2N213A
			25	100	125		2N214
				100	180		2N214A
				100	180		2N214MP
4.5	0.5	7	25	50	50		2N215
			15	50	50		2N216
			18	70	80		2N217
				70	125		2N217EQ
9	1	4.5		15	35		2N218
			16	15	50		2N219
			10	2	100		2N220
			18	150	250		2N223
			25	150	250		2N224
			25	150	250		2N225
			30	150	250		2N226
			30	150	250		2N227
			25	100	50		2N228
			12	40	50		2N229
			30	2A	15.0W†		2N230
			4.5	3	9		2N231
			4.5	3	9		2N232
			10	50	50		2N233
			10	50	50		2N233A
				3A	24.0W†		2N234
			30	3A	25.0W†		2N234A
			40	3A	25.0W†		2N235
			40	3A	25.0W†		2N235A
			40	2A	10.0W†		2N235B
			40	3A	25.0W†		2N236
			40	3A	25.0W†		2N236A
			40	3A	25.0W†		2N236B
		10*	45	20	150		2N237
			20	100	50		2N238
3	0.5	12	6	15	25		2N240
			25	200	100		2N241
			25	200	200		2N241A
			45	2A	15.0W†		2N242
				60	750		2N243
				60	750		2N244
			35	10	35		2N247
				10	80		2N247/33
			25	5	30		2N248
			25	200	350		2N249
			30	3A	12.0W†		2N250
				7A	90.0W†		2N250A
			60	2A	12.0W		2N251
				7A	90.0W†		2N251A
			16	5	30		2N252
6	0.5	17	12	5	65		2N253

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N254	TII	NPN	5							15	
2N255	CBS SYL HEN	PNP	16				6	500	30†	40†	50†
2N255A	CBS DEL	PNP	16				1.5	500		30†	
2N256	CBS HEN SYL DEL CLE	PNP	16				3	500	30†	40†	50†
2N256A	CBS DEL	PNP	16				3	500	30†		
2N257	CBS SYL INT BC CLE	PNP	16				12	500	50		
2N257B	CLE BC	PNP	16				2	500		77	
2N257G	CLE BC	PNP	16				2	500		65	
2N257W	CLE BC	PNP	16				2	500		85	
2N260	CLE	PNP	1				6	1		16	
2N260A	CLE	PNP	1				6	1		16	
2N261	CLE	PNP	1				6	1		10	
2N262	CLE	PNP	1				6	1		20	
2N262A	CLE	PNP	1				6	1		20	
2N265	TH GE ETC	PNP	11				5	1	60	110	180
2N266	GE	PNP	1							24	
2N267	RCA ADA	PNP	13							66	
2N268	CLE SYL INT BC CBS	PNP	16					500		50†	
2N268A	CLE HEN BC CBS	PNP	16								
2N269	RCA ADA AT ETC	PNP	13				0.1	12	30†	50†	
2N269A	AT	PNP	13				0.1	12	30†	50†	
2N270	RCA ADA ETC UST	PNP	11				1	150	35	70†	105
2N271	RAY ETC	PNP	5				6	1	25	45	75
2N271A	RAY ETC	PNP	5				6	1	25	45	75
2N272	RAY ETC	PNP	5				5	1	60	120	180
2N273	RAY ETC	PNP	5				0.2	50	10	20	30
2N274	RCA ADA	PNP	31				12	1.5	20	60	175
2N277	DEL CBS TH TII MR	PNP	25				2	5A	35†		70†
2N278	DEL CBS TS MR TI TS	PNP	25				2	5A	35†		70†
2N279	AMP ETC RO	PNP	1		110 μ A		2	0.5	20	30	40
2N280	AMP ETC RO	PNP	1		150 μ A		2	3	30	47	75
2N281	AMP ETC RO	PNP	1	6	145 μ A	300 μ A	5.4	10	45†	70†	120†
2N282	AMP MUL ETC RO	PNP	1	6	145 μ A	300 μ A	5.4	10	45†	70†	120†
2N283	AMP ETC	PNP	1	6	200 μ A	600 μ A	10	0.5	30	40	55
2N284	AMP ETC RO	PNP	1	6	200 μ A	600 μ A	1.5	125	25†	45†	
2N284A	AMP ETC RO	PNP	1	6	200 μ A	600 μ A	1.5	125	25†	45†	
2N285	HEN	PNP	16				5	250		200†	
2N285A	HEN SYL CBS	PNP	16				5	250		200†	
2N290	DEL	PNP	25				2	1.2A		72†	
2N291	TII STCA ETC	PNP	5				0.5	100	30†	45†	90†
2N292	SYL GE ETC	NPN	12				5	1	6†		44†
2N293	GE ETC	NPN	12				5	1	6†		55†
2N296	SYL	PNP	16				1.5	1A	19†		
2N297	CLE CBS	PNP	16		300		2	500	25	80	100
2N297A	DEL MR HEN CBS CLE	PNP	16		300		2	500	40		100
2N299	PCO	PNP	13				3	0.5		18	
2N300	PCO	PNP	15				3	0.5	11	18	
2N301	RCA SYL ADA CBS AT	PNP	16				1.5	700	30†	62	
2N301A	RCA SYL ADA CBS AT	PNP	16				1.5	700	30†	62	
2N301-B	BC	PNP	16								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
6	0.5	17	20	5	65		2N254
			15	3A	1.5W		2N255
				5A			2N255A
			30	3A	1.5W		2N256
				5A			2N256A
			20	3A	45.0W†		2N257
			20	3A	45.0W†		2N257B
			20	3A	45.0W†		2N257G
			20	3A	45.0W†		2N257W
				50	200		2N260
				50	200		2N260A
				50	200		2N261
				50	200		2N262
				50	200		2N262A
5	1	15	30	50	75		2N265
		8	18	200	75		2N266
				10	35		2N267
			40	3A	45.0W†		2N268
			60	3A	10.0W†		2N268A
			24	100	120		2N269
			24	100	120		2N269A
				75	150		2N270
6	1	4.5	10	200	150		2N271
9	0.5	4.5	10	200	150		2N271A
		12	24	100	150		2N272
			30	100	150		2N273
			40	10	120		2N274
			40	15A	55.0W†		2N277
			45	15A	55.0W†		2N278
2	0.5	10	30	50	125		2N279
							2N280
2	0.5	8	30	50	125		2N281
2	0.5	15*	16	50	167		2N282
2	0.5	15*	16	125	165		2N283
10	0.5	10	30	10	125		2N284
2	0.5	15*	32	125	125		2N284A
							2N285
2	0.5	15*	60	125	125		2N285A
				3A	25.0W†		2N290
			35	3A	37.0W†		2N291
				12A	55.0W†		2N292
			25	200	180		2N293
			15	20	65		2N296
			15	20	65		2N297
			60	2A	20.0W†		2N297A
			50	3A	14.0W†		2N299
			50	4A	10.0W†		2N300
		5	4.5	5	20		2N301
			4.5	5	20		2N301A
			40	3A	11.0W†		2N301-B
			60	3A	11.0W†		
			20	3A	45.0W†		

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
2N301-Gn	BC	PNP	16								
2N301-W	BC	PNP	16								
2N302	RAY ETC	PNP	5					1	40		120
2N303	ETC	PNP						1	40		120
2N306	CBS SYL ETC	NPN	13				4.5	1	16		
2N307	SYL TS	PNP	16				1.5	200	20†		
2N307A	SYL	PNP	16				1	200	30†		
2N308	TII STCA ETC	PNP	5					1	39		42
2N309	TII STCA	PNP	5					1	41		44
2N310	TII	PNP	5								
2N311	GT ETC	PNP	13	250			4.5	10		50	
2N312	MR CBS GT SYL ETC	NPN	13				5	10	25†		75†
2N315	CBS GT IND ETC	PNP	13				4.5	1		70	
2N315A	GT IND ETC	PNP	13	600			5	1		70	
2N316	GT IND ETC	PNP	13	600			4.5	1		130	
2N316A	GT IND ETC	PNP	13	600			5	1		130	
2N317	SYL GI IND ETC	PNP	13				0.25	400	20†	30†	60†
2N317A	GT IND	PNP	13	600			5	1		180	
2N318	GT	PNP								100	
2N319	TH GE ETC	PNP	13				5	1	16	33	41
2N320	TH GE IND ETC	PNP	13				5	1	30	48	64
2N321	SYL TH GE IND ETC	PNP	13				5	1	44	64	88
2N322	TH GE ETC	PNP	13				5	1	30	44	64
2N323	TH GE IND ETC	PNP	13				5	1	44	64	88
2N324	TH GE ETC	PNP	13				5	1	68	81	120
2N325	SYL	PNP	16				1	500	30†		60†
2N326	SYL CBS	NPN	16				1	500	30†		60†
2N327	RAY	PNP	13				6	1	9	14	18
2N327A	CRY RAY NAT SP WTC	PNP	13				5	3		14	
2N327B	CRY	PNP	17				5	3		14	
2N328	RAY	PNP	13				6	1	18	24	36
2N328A	RAY NAT SP CRY	PNP	13				5	3		28	
2N328B	CRY	PNP	17				5	3		28	
2N329	RAY	PNP	13				6	1	36	50	72
2N329A	RAY NAT CRY	PNP	13				5	3	36	60	
2N330	RAY	PNP	13				6	1	9	30	72
2N330A	RAY	PNP	13				1	9	25		
2N331	ETC RCA GT MR ADA	PNP	13				6	1	30	50	70
2N332	RAY GE TT BO TII NAT	NPN	13				5	1	9	15	22
2N332A	GE NAT	NPN	13				4.5	1	9	16	22
2N333	RAY GE TT BO TII NAT	NPN	13				5	1	18	30	41
2N333A	GE NAT	NPN	13				5	1	18	30	40
2N334	RAY TT GE TII NAT	NPN	13				5	1	18	45	90
2N334A	GE NAT	NPN	13				5	1	18	38	90
2N334B	GE	NPN	13								
2N335	RAY GE TT NAT BO TII	NPN	13				5	1	35	50	90
2N335A	GE NAT	NPN	13				4.5	1	36	50	90
2N335B	GE	NPN	13				5	1	37	52	90
2N336	RAY TT GE TII	NPN	13				5	1	78	100	330
2N336A	GE NAT	NPN	13				4.5	1	76	95	333

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			20	3A	45.0W†		2N301-Gn
			20	3A	45.0W†		2N301-W
			10	200	150		2N302
				200	150		2N303
			12	100	50		2N306
			35	1A	10.0W†		2N307
			35	2A	17.0W†		2N307A
			20	5	30		2N308
			20	5	30		2N309
			30	5	30		2N310
			15		150		2N311
			15	200	100		2N312
			20	200	100		2N315
			20	200	150		2N315A
			15	500	100		2N316
			15	500	150		2N316A
			12	500	110		2N317
			10	500	150		2N317A
			12	50	50		2N318
5	1	6	20	200	200		2N319
5	1	6	20	200	200		2N320
5	1	6	20	200	200		2N321
5	1	6	16	100	140		2N322
5	1	6	16	100	140		2N323
5	1	6	16	100	140		2N324
			35	2A	12.0W†		2N325
			35	2A	7.0W†		2N326
6	1	18	50	50	335		2N327
5	1	12	40	50	385		2N327A
5	1	10	40	100	400		2N327B
6	1	18	35	100	335		2N328
5	1	12	35	50	385		2N328A
5	1	10	35	100	400		2N328B
6	1	18	30	50	335		2N329
5	1	12	30	50	385		2N329A
6	1	12	45	50	335		2N330
		8	20	50	350		2N330A
6	1	9	16	200	75		2N331
5	1	12	45	25	150		2N332
5	1	12	45	25	500		2N332A
5	1	25	45	25	150		2N333
5	1	12	45	25	500		2N333A
5	1	12	45	25	150		2N334
5	1	12	45	25	500		2N334A
					500		2N334B
4.5	1	12	45	25	150		2N335
5	1	12	45	25	500		2N335A
5	1	11	60	25	500		2N335B
4.5	1	15	45	25	150		2N336
5	1	12	45	25	500		2N336A

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N337	RAY TT GE TH TII	NPN	17				20	1	19	55	
2N337A	GE	NPN	13				20	1	19	55	
2N338	RAY TT GE TH TII	NPN	17				20	1	39	99	
2N338A	GE	NPN	13				20	1	39	99	
2N339	TT TII	NPN	17				10	5	9		90
2N339A	TT	NPN	13				10	1	15	53	90
2N340	TT TII	NPN	13				10	5	9		90
2N340A	TT	NPN	13				10	1	15	53	90
2N341	TT TII	NPN	13				10	5	9		90
2N341A	TT	NPN	13				10	1	15	53	90
2N342	TT TII	NPN	13				10	5	9		32
2N342A	TII TT	NPN	13				10.5	5	9†	20†	32†
2N342B	TII	NPN	17	85		100 μ A	10	5	9	21	32
2N343	TT TII	NPN	13				10	5	29		90
2N343A	TII	NPN					10	5	28†		95†
2N343B	TII TT	NPN	17	65		100 μ A	10	5	28	59	90
2N344	SC PCO	PNP(SB)	10				3	0.5	11	22	33
2N345	PCO SC	PNP	10				3	0.5	25	35	110
2N346	PCO SC	PNP	10				3	0.5	10	35	
2N347	BO	NPN	5				10	5	9	48	
2N348	CBS BO	NPN	5				10	5	9	25	
2N349	CBS BO	NPN	5				10	5	9	18	
2N350	SYL MR CBS	PNP	16				2	700		30	
2N350A	MR	PNP	16				2	700		30	
2N351	SYL MR RCA ADA CBS	PNP	16				2	700		45	
2N351A	MR	PNP	16				2	700		45	
2N352	PCO CBS	PNP	15					1A	30		
2N353	PCO CBS	PNP					1.5	1A	40†		150†
2N354	PCO	PNP	10				6	1	9	18	
2N355	PCO	PNP	10					1	9		
2N356	RCA SYL ADA GT ETC	NPN	13				5	1	20	30	50
2N356A	GT CBS SYL ETC TAD	NPN	13				5	1		60	
2N357	CBS ETC SYL GT RCA	NPN	13				5	1		45	
2N357A	GT SYL ETC TAD CBS	NPN	13				5	1		90	
2N358	ETC SYL GT RCA ADA	NPN	13				5	1		60	
2N358A	†T SYL ETC	NPN	13				5	1		120	
2N359	ETC RAY MR IND UST	PNP	17		10 μ A	25 μ A	6	1		150	
2N360	IND RAY UST ETC	PNP	13				1	50	50†	100†	150†
2N361	IND RAY UST ETC	PNP	13				1	50		70	
2N362	IND RAY UST ETC	PNP	13				6	1	50	100	150
2N363	IND RAY UST	PNP	13				6	1	25	50	75
2N364	TII ETC	NPN	5				5	1	9	15	19
2N365	TII ETC	NPN	5				5	1	19	34	49
2N366	TII ETC	NPN	5				5	1	49	95	142
2N367	TII ETC	PNP	5				5	1	9	15	19
2N368	TII	PNP	5				5	1	19	34	49
2N369	TII	PNP	5				5	1	49	95	142
2N370	SYL RCA ADA	PNP	3				12	1	40	60	175
2N370/33	SYL	PNP					12	1		97	
2N371	SYL RCA ADA	PNP	2				12	1	20	60	175

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			30	20	125		2N337
				20	500		2N337A
			30	20	125		2N338
				20	500		2N338A
			55	60	1.0W		2N339
			60		3.0W		2N339A
			85	60	1.0W		2N340
			85		3.0W		2N340A
			125	60	1.0W		2N341
			125		3.0W		2N341A
			60	60	1.0W		2N342
			60	60	1.0W		2N342A
			85		750		2N242B
			60		1.0W		2N343
				60	1.0W		2N343A
			65	60	750		2N343B
			5	5	20		2N344
			5	5	20		2N345
			5	5	20		2N346
			60	60	750		2N347
			90	50	750		2N348
			125	40	750		2N349
				3A	10.0W†		2N350
			40	3A	25.0W†		2N350A
				3A	10.0W†		2N351
			40	3A	25.0W†		2N351A
			40	2A	25.0W†		2N352
			40	2A	10.0W†		2N353
				50	150		2N354
				50	150		2N355
			18	500	100		2N356
			20	500	150		2N356A
			15	500	100		2N357
			20	500	150		2N357A
			12	500	100		2N358
			15	500	150		2N358A
6	1	22*	22	200	150		2N359
6	1	13*	20	200	150		2N360
6	1	13	30	200	150		2N361
6	1	13	20	100	150		2N362
6	1	13	40	100	150		2N363
				50	150		2N364
				50	150		2N365
				50	150		2N366
				50	100		2N367
				50	150		2N368
				50	150		2N369
			20	10	80		2N370
				10	80		2N370/33
			20	10	80		2N371

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N371/33	SYL	PNP					12	1		97	
2N372	SYL RCA ADA	PNP	3				12	1	20	60	400
2N372/33	SYL	PNP					12	1		97	
2N373	SYL RCA ADA	PNP	3				12	1	20	60	175
2N374	SYL RCA ADA	PNP	3				12	1	20	60	400
2N375	MR CLE CBS	PNP	16				4	1A	35†	55†	90†
2N376	RCA ADA MR CBS	PNP	16				2	700		60	
2N376A	MR CLE	PNP	16				2	700	35†		120†
2N377	SYL CBS ETC TH TAD	NPN	13				1	30	20†	40†	60†
2N377A	SYL ST ETC TAD	NPN	13				0.5	30	20†		60†
2N378	TS CBS	PNP	16				2	500		60†	
2N379	TS CLE CBS DEL	PNP	16				2	500		80†	
2N380	TS CLE CBS DEL	PNP	16				2		20†		90†
2N381	SYL IND ETC TS	PNP	13				1	20	35†	50†	65†
2N382	SYL IND ETC TS	PNP	13				5	10	70	90	135
2N383	SYL TS IND ETC	PNP	13				5	10	90	115	135
2N384	SYL RCA ADA AT CSF	PNP	31				12	1.5	20	60	175
2N384/33	SYL	PNP					12	1.5		60	
2N385	CBS SYL ETC TAD	NPN	13		50	400	0.75	30	30†	60†	110†
2N385A	ST SYL ETC TAD	NPN	13				0.5	30	30†		110†
2N386	PCO SC CBS	PNP	66				2	200		135†	
2N387	PCO SC CBS	PNP	66				2	200		152†	
2N388	CSF CBS ETC SYL RAY	NPN	13				3	0.5	40	155	
2N388A	ST SYL ETC TII	NPN	13				0.5	30	60†		180†
2N389	SIL TT RAY TII TIL	NPN	34				30	300	10	30	
2N389A	SIL SEC	NPN	34				10				
2N391	DEL	PNP					2	3A	30†		75†
2N392	DEL CBS	PNP	16				3	1A			200†
2N393	SC SPR PCO CBS	PNP	10				3	0.5	40	155	
2N394	GE ETC	PNP	13				1	10	20		150†
2N394A	GE	PNP	13				20			70†	
2N395	RAY TH TII SYL ETC	PNP	13				1	10	20†		150†
2N396	ETC RAY TII SYL TH	PNP	13				1	10	30†		150†
2N396A	GE SYL ETC PCO TS	PNP	13				5	1		70	
2N397	RAY TII SYL ETC GE	PNP	13				1	10	40†		150†
2N398	SYL RCA ADA HIT AT	PNP	13				6	1		45	
2N398A	MR SYL TII	PNP	17				6	1	20	45	
2N398B	TII RCA	PNP	17				6	1	40	65	
2N399	SYL BEN CBS	PNP	15				5	500		80	
2N400	BEN CBS	PNP	16				4.5	250		200	
2N401	SYL BEN CBS	PNP	16				5	500		52	
2N402	WES ETC	PNP	13				10.5	1	15	25	45
2N403	WES ETC	PNP	13				10.5	1	20	33	60
2N404	ETC RAY RCA UST TAD	PNP	13				5	10		86	
2N404A	SYL CLE ETC TAD GE	PNP	13				5	10		86	
2N405	SYL RCA ADA ETC	PNP	11				6	1	20	35	80
2N406	RCA SYL ADA ETC HI	PNP	13				6	1	20	35	80
2N407	SYL RCA ADA ETC	PNP	11				1	50	50†	75†	135†
2N408	SYL RCA ADA ETC HI	PNP	13				1	50	50†	75†	135†
2N409	SYL RCA ADA ETC	PNP	11				6	1	22	48	110

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
				10	80		2N371/33
				10	80		2N372
				10	80		2N372/33
				10	80		2N373
				10	80		2N374
			60	3A	45.0W†		2N375
			40	3A	10.0W†		2N376
			40	3A	25.0W†		2N376A
			20	200	150		2N377
			20	200	150		2N377A
			20	5A	50.0W†		2N378
			40	7A	15.0W†		2N379
			30	7A	50.0W†		2N380
6	1	6	25	200	200		2N381
5	1	5.5	25	200	200		2N382
6	1	5	25	400	200		2N383
			40	10	120		2N384
				10	120		2N384/33
			25	200	150		2N385
			40	200	150		2N385A
			60	3A	12.5W†		2N386
			80	3A	12.5W†		2N387
			20	200	150		2N388
			40	200	150		2N388A
			60	2A	85.0W†		2N389
				3A	85.0W†		2N389A
				5A			2N391
			40	5A			2N392
			6	50	25		2N393
			10	200	150		2N394
				200	150		2N394A
			15	200	150		2N395
			20	200	150		2N396
			20	200	150		2N396A
			15	200	150		2N397
			100	100	50		2N398
			100	200	150		2N398A
			105	200	250		2N398B
			40	3A	25.0W†		2N399
			40	3A	25.0W†		2N400
			40	3A	25.0W†		2N401
			20	150	180		2N402
			20	200	180		2N403
6	1	3.5	24	100	120		2N404
			35	150	150		2N404A
			18	35	150		2N405
4.5	0.5	10	18	35	150		2N406
			18	70	150		2N407
			18	70	150		2N408
			18	15	80		2N409

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N410	ETC SYL RCA ADA HI	PNP	13				6	1	22	48	110
2N411	ETC SYL RCA ADA	PNP	11				6	1	22	48	110
2N412	ETC SYL RCA ADA HI	PNP	13				6	1	22	48	110
2N413	TAD GIC UST RAY TS	PNP	13				6	1	20	30	
2N413A	SYL ETC	PNP	13				6	1	10	25	40
2N414	IND RAY GIC SYL TAD	PNP	13				6	1	20	60	
2N414A	SYL ETC TS	PNP	13				6	1	30	40	90
2N414B	IND ETC	PNP	13				6	1	30	60	90
2N414C	ETC IND	PNP	6				1	30	60	90	
2N415	RAY IND ETC	PNP	13				1	40	80	120	
2N415A	RAY TS ETC	PNP	13					1	40	80	120
2N416	RAY ETC IND GIC TS	PNP	13				6	1	45	80	120
2N417	IND RAY UST ETC TS	PNP	13			600	6	1	60	140	260
2N417A	TT	PNP	13				6	1	6	140	260
2N418	RAY BEN CLE	PNP	16				3	200		77†	
2N419	RAY BEN SYL CBS	PNP	16				5	80		40	
2N420	BEN SYL CLE CBS	PNP	16				3	200		77†	
2N420A	BEN CLE	PNP	16				3	200		77†	
2N422	MR RAY ETC	PNP	13				6	1	25†	50†	75†
2N424	SYL RAY TII TT SIL	NPN	34				15	1A	12†	30†	60†
2N424A	SIL FAN AMF	NPN	34				15	1	12†	30†	60†
2N425	RAY IND UST TAD SYL	PNP	13				0.2		20†	30†	40†
2N426	UST ETC RAY IND TAD	PNP	13				0.3		10	18	
2N427	RAY IND UST MR TAD	PNP	13				0.2	1	40†	55†	80†
2N428	RAY IND UST SYL TAD	PNP	13				0.2	1	40†	60†	80†
2N438	RAY ETC GIC SYL GT	NPN	13		300		6	1	15	25	
2N438A	ETC CBS SYL RAY TAD	NPN	13				6	1		25	
2N439	RAY ETC CBS SYL GT	NPN	13			300	6	1	15	35	
2N439A	ETC CBS SYL TAD RAY	NPN	13			300	6	1	15	35	
2N440	ETC SYL CBS RAY GI	NPN	13			300	6	1	15	65	
2N440A	ETC CBS SYL TAD	NPN	13			300	6	1	15	65	
2N441	DEL CBS TII MR TH	PNP	25				2	5A	20†		40†
2N442	TII DEL TS CBS SEO	PNP	25				2	5A	20†		40†
2N443	TII DEL CBS TS MR	PNP	25				2	5A	20†		40†
2N444	ETC CBS	NPN	13				4.5	1		10	
2N444A	ETC GI TAD CBS	NPN	13				5	1	15	15	
2N445	CBS ETC	NPN	13				4.5	1		20	
2N445A	GI CBS ETC TAD	NPN	13				5	1	35	70	
2N446	CBS ETC	NPN	13				4.5	1	30	60	
2N446A	GI ETC TAD CBS	NPN	13				5	1	60	120	250
2N447	GI CBS ETC	NPN	13				4.5	1		50	
2N447A	GI ETC CBS	NPN	13		600		5	1	85	150	300
2N447B	GI	NPN	13				5	1		200	
2N448	GE ETC	NPN	12				5	1	8†	25†	51†
2N449	GE ETC	NPN	12				1	1	32†	72†	100†
2N450	ETC GE	PNP	11				5	1		130	
2N451	GE	NPN	70				10	1A	10†		
2N452	GE	NPN	70				20	2A	8†	12†	
2N453	GE	NPN	70				20	1A	20†	30†	
2N454	GE	NPN	70				20	1A	8†	15†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
6	1	6	18	15	80		2N410
			20	15	80		2N411
			20	15	80		2N412
			18	200	120		2N413
			15	200	150		2N413A
			15	200	150		2N414
			15	200	150		2N414A
			16	400	200		2N414B
				400	200		2N414C
			10	200	150		2N415
		10	15	200	150		2N415A
			12	200	150		2N416
			10	200	150		2N417
			30		150		2N417A
			80	5A	25.0W†		2N418
		6	45	3A	25.0W†		2N419
			45	5A	25.0W†		2N420
			70	5A	25.0W†		2N420A
			20	100	150		2N422
			80	2A	45.0W†		2N424
				3A	85.0W†		2N424A
			18	400	150		2N425
			18	400	150		2N426
			15	400	150		2N427
			12	400	150		2N428
			25	400	100		2N438
			25	400	150		2N438A
			20	400	100		2N439
			20	200	150		2N439A
			15	400	100		2N440
			15	200	150		2N440A
			25	15A	55.0W†		2N441
			30	15A	55.0W†		2N442
			45	15A	55.0W†		2N443
			15	100	100		2N444
5	1	12	25		150		2N444A
5	1	12	12	100	100		2N445
			18		150		2N445A
5	1	12	10	100	100		2N446
			15		150		2N446A
4.5	1	12	6	100	100		2N447
5	1	12	12		150		2N447A
					150		2N447B
			15	20	65		2N448
			15	20	65		2N449
			12	125	150		2N450
			65	5A	85.0W†		2N451
			65	5A	85.0W†		2N452
			30	5A	85.0W†		2N453
			65	5A	85.0W†		2N454

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N456	TII RCA CLE CBS	PNP	16				1.5	1A		130	
2N456A	DEL TII CLE	PNP	16				1.5	1A	40†	120†	
2N456B	TII SP	PNP	16				1.5	1A	40†	100†	
2N457	TII RCA CBS	PNP	16				1.5	1A	40†		
2N457A	DEL TII CLE	PNP	16				1.5	1A	40†	120†	
2N457B	TII	PNP	16				1.5	1A	40†	100†	
2N458	TII CBS	PNP	16				1.5	1A		130	
2N458A	TII CLE DEL	PNP	16				1.5	1A	40†	120†	
2N458B	TII DEL	PNP	16				1.5	1A	40†	100†	
2N459	TS CBS	PNP	16				2	2	20†		70†
2N460	TS IND ETC	PNP	13				5	1	21	25	32
2N461	TS MR IND ETC UST GE	PNP	13				5	1	30		199
2N462	PCO SC ETC	PNP	45				0.5	200	20†	45†	75†
2N463	WE CBS	PNP	55				2.0	2.0	20†		60†
2N464	IND SYL UST RAY GI	PNP	13				6	1	14	22	33
2N465	SYL UST IND RAY MR	PNP	13				6	1	27	45	66
2N466	SYL UST IND RAY GI	PNP	13				6	1	54	90	130
2N467	IND RAY SYL GI MR	PNP	13				6	1	110	180	260
2N468	CBS GE	NPN					1.5	1A	15†		80†
2N469	RCA GI	NPN	13				5	1	10	50	
2N469A	GI	PNP	14				5	1		75	
2N470	TT GE	NPN	13				6	1	10	16	25
2N471	TT GE	NPN	13				6	1	10	16	25
2N471A	TT GE	NPN	13				6	1	10	16	25
2N472	TT GE	NPN	13				6	1	10	16	25
2N472A	TT GE	NPN	13				5	1	10	18	25
2N473	TT GE	NPN	13				6	1	20	30	50
2N474	TT GE	NPN	13				6	1	20	30	50
2N474A	TT GE	NPN	13				6	1	20	30	50
2N475	TT GE	NPN	13				6	1	20	30	50
2N475A	TT GE	NPN	13				5	1	20	35	50
2N476	TT	NPN	13				6	1	30	45	60
2N477	TT	NPN	13				6	1	30	45	60
2N478	TT GE	NPN	13				6	1	40	60	100
2N479	TT GE	NPN	13				6	1	40	60	100
2N479A	TT GE	NPN	13				6	1	40	60	100
2N480	TT GE	NPN	13				6	1	40	60	100
2N480A	TT GE	NPN	13				5	1	40	60	100
2N481	RAY IND UST ETC	PNP	13				6	1	30	50	100
2N482	ETC RAY UST SYL	PNP	13				6	1	30	50	100
2N483	ETC RAY IND UST	PNP	13				6	1	30	65	100
2N484	ETC RAY UST IND SYL	PNP	17				6	1	50	90	150
2N485	RAY IND UST ETC	PNP	13				6	1	30	50	100
2N486	RAY IND UST ETC	PNP	13				6	1	75	100	200
2N495	SC PCO GI	PNP	13				6	1	9	18	
2N496	SC PCO	PNP	13				6	1	9	18	
2N497	TT TII RHE NAT GE FC	NPN	17	60		250 μ A	10	200	12†	20†	36†
2N497A	GE SSP	NPN	17				10	200	12†	20†	36†
2N498	TT TII RHE NAT RAY	NPN	17	100		250 μ A	10	200	12†	20†	36†
2N498A	GE SSP	NPN	17				10	200	12†	20†	36†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	5A	50.0W†		2N456
			20	7A	50.0W†		2N456A
			30	7A	150.0W†		2N456B
			60	5A	50.0W†		2N457
			30	7A	50.0W†		2N457A
			40	7A	150.0W†		2N457B
			80	5A	50.0W†		2N458
			40	7A	50.0W†		2N458A
			45	7A	150.0W†		2N458B
			60	5A	50.0W†		2N459
4.5	0.5	9	10	400	200		2N460
4.5	1	9	10	400	200		2N461
			35	200	150		2N462
			60	5A	37.0W†		2N463
6	1	12	40	100	150		2N464
6	1	12	30	100	150		2N465
6	1	12	20	100	150		2N466
6	1	12	15	100	150		2N467
				3A			2N468
5	1	16	18	50	50		2N469
					50		2N469A
6	1	17	15		200		2N470
6	1	17	30		200		2N471
6	1	22	30		200		2N471A
6	1	17	45		200		2N472
5	1	30	45		200		2N472A
6	1	17	15		200		2N473
6	1	17	30		200		2N474
6	1	20	30				2N474A
6	1	17	45		200		2N475
5	1	30	45		200		2N475A
6	1	19	15		200		2N476
6	1	19	30		200		2N477
6	1	17	15		200		2N478
6	1	17	30		200		2N479
6	1	20	30		200		2N479A
6	1	17	45		200		2N480
5	1	30*	45		200		2N480A
6	1	10	12	20	150		2N481
6	1	10	12	20	100		2N482
6	1	10	12	20	100		2N483
6	1	10	12	20	150		2N484
6	1	10	12	10	100		2N485
6	1	10	10	10	100		2N486
			25	50	150		2N495
			10	50	150		2N496
			60	500	800		2N497
			60	500	1.0W		2N497A
			100	500	800		2N498
			100	500	1.0W		2N498A

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N499	PCO SPR SC	PNP	13				0.5	10	20†		
2N501	SC PCO CBS SPR	PNP	13				0.5	20	20†	35†	
2N501/18	STL	PNP	17				0.5	10	20†		
2N501A	SC PCO SPR CBS	PNP	13				0.5	10	20†	35†	
2N502	SC PCO SPR	PNP	13				10	2	9	65	
2N502A	PCO SC	PNP	13				10	2	9	15	
2N503	SC PCO SPR	PNP	13				10	3	9	65	
2N504	SC PCO SPR	PNP	17				12	1		16	
2N505	MR ETC	PNP	13				1.5	10	30	40	90
2N506	STL ETC	PNP	5				1	10		25	
2N507	STL	NPN	5				0.5	10	25		50
2N508	GE TH ETC	PNP	13				5	1		112	
2N508A	GE	PNP	17				5	1	75	110	180
2N509	WE	PNP	13				10	10		50	
2N511	TII CBS	PNP	16				1.5	100		35†	
2N511A	TII CBS	PNP	16				1.5	100		35†	
2N511B	TII CBS	PNP	16				1.5	100		35†	
2N512	TII CBS	PNP	16				2	500		72†	
2N512A	TII CBS	PNP	16				2	500		72†	
2N512B	TII CBS	PNP	16				2	500		72†	
2N513	TII	PNP	16				2	1A		70†	
2N513A	TII	PNP	16				2	1A		70†	
2N513B	TII	PNP	16				2	1A		70†	
2N514	TII	PNP	16				2	1A		70†	
2N514A	TII	PNP	16				2	1A		70†	
2N514B	TII	PNP	16				2	1A		70†	
2N515	STL ETC CBS	NPN	5				6	1	5	7.5	15
2N516	STL ETC CBS	NPN	5				6	1	5	7.5	15
2N517	STL ETC CBS	NPN	5				6	1	5	7.5	15
2N518	GE ETC	PNP	12				1	10	30	60†	90
2N519	ETC UST STL IND GI	PNP	13				4.5	1	15	25	45
2N519A	IND ETC GI TAD UST	PNP	13				5	1	15	25	
2N520	ETC UST GI IND STL	PNP	13				4.5	1	20	40	60
2N520A	GI IND TAD	PNP	13				5	1	40	100	150
2N521	GT IND UST ETC	PNP	13				4.5	1	35	70	110
2N521A	IND ETC GI TAD	PNP	13				5	1	70	150	
2N522	GI UST IND ETC	PNP	13				4.5	1	60	120	200
2N522A	GI IND ETC TAD UST	PNP	13				5	1	100	200	
2N523	GI IND UST ETC	PNP	13				4.5	1	80	200	
2N523A	GI IND	PNP	13		600		5	1	125	300	
2N524	TH GE STL ETC TII	PNP	13				5	1	16	30	41
2N524A	MR	PNP	17				5	1	18		41
2N525	TH GE STL ETC TII	PNP	13				5	1	30	44	64
2N525A	MR	PNP	17				5	1	30		64
2N526	STL ETC TS TH GE	PNP	13				5	1	44	64	88
2N526A	MR	PNP	17				5	1	44		88
2N527	STL ETC TH GE TII	PNP	17				5	1	60	81	120
2N527A	MR	PNP	17				5	1	60		120
2N528	WE	PNP					1.5	500	20		
2N529	ETC GI	PNP	13				1		15		45

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			30	18	30		2N499
			12	50	60		2N501
			12	20	150		2N501/18
			12	50	25		2N501A
			20		60		2N502
		5*	30		25		2N502A
			20	50	25		2N503
			25	50	30		2N504
		18*		250	125		2N505
				100	50		2N506
			50	40	50		2N507
1	1	3	16	200	200		2N508
1	1	3	30	200	200		2N508A
				40	250		2N509
			40	10A	80.0W†		2N511
			30	10A	80.0W†		2N511A
			40	10A	80.0W†		2N511B
			40	15A	80.0W†		2N512
			60	15A	80.0W†		2N512A
			80	15A	80.0W†		2N512B
			40	20A	80.0W†		2N513
			60	20A	80.0W†		2N513A
			80	20A	80.0W†		2N513B
			40	25A	80.0W†		2N514
			60	25A	80.0W†		2N514A
			80	25A	80.0W†		2N514B
			18	10	50		2N515
			18	10	50		2N516
			18	10	50		2N517
			12	125	150		2N518
4.5	1	10	100	15	100		2N519
4.5	1	12	18		150		2N519A
4.5	1	10	12	200	100		2N520
5	1	12	15		150		2N520A
4.5	1	10	10	200	100		2N521
5	1	12	12	200	150		2N521A
4.5	1	10	8	200	100		2N522
5	1	12	10	200	150		2N522A
4.5	1	10	6	400	100		2N523
4.5	1	12	6	200	150		2N523A
5	1	6	30	500	225		2N524
5	1	15*	30	500	225		2N524A
5	1	6	30	500	225		2N525
5	1	15*	30	500	225		2N525A
5	1	6	30	500	225		2N526
5	1	15*	30	500	225		2N526A
5	1	6	30	500	225		2N527
5	1	15*	30	500	225		2N527A
				1A	1.0W		2N528
		14	15		100		2N529

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N530	GI ETC	PNP	13				1		20		60
2N531	GI ETC	NPN/PNP	13				1	1	25		75
2N532	GI ETC	NPN/PNP	13				1	1	30		90
2N533	GI ETC	NPN/PNP	13				1	1	35		105
2N534	PCO SC	PNP	10				5	1	35	100	
2N535	PCC SC ETC	PNP	10				5	1	35	100	200
2N535A	PCO SC ETC	PNP	10				4.5	1	35	100	200
2N535B	PCO SC ETC	PNP	10				4.5	1	35	100	200
2N536	PCO SC	PNP	10				1	30	100†	150†	
2N537	WE	PNP	17				10.5	10		20	
2N538	MH KSC CBS	PNP	27				2	500		115†	
2N538A	MH KSC CBS	PNP	27				2	500		115†	
2N539	MH KSC CBS	PNP	27				2	500		115†	
2N539A	MH KSC CBS	PNP	27				2	500		115†	
2N540	MH KSC CBS	PNP	27				2	500		115†	
2N540A	MH KSC CBS	PNP	27				2	500		115†	
2N541	TT NAT GE	NPN	13				6	1	80	130	200
2N541A	TT	NPN	17								
2N542	TT NAT GE	NPN	13				6	1	80	130	200
2N542A	TT GE	NPN	13				5	1	80		200
2N543	TT	NPN	13				6	1	80	130	200
2N543A	TT	NPN	13				5	1	80		200
2N544	SYL RCA ADA	PNP	3				12	1	20	60	175
2N544/12	SYL	PNP	3				12	1	20	60	175
2N544/13	SYL	PNP									
2N544/33	SYL	PNP					12	1		97	
2N545	TT SSP	NPN	13								
2N546	TT SSP	NPN	13								
2N547	TT SIL SSP	NPN	17								
2N548	TT SIL SSP	NPN	17								
2N549	TT SSP SIL	NPN	17								
2N550	TT	NPN	17								
2N551	TT SSP SIL	NPN	17								
2N552	TT SIL	NPN	17								
2N553	DEL CBS	PNP	16				2	500	40†	55†	80†
2N554	SYL CBS DEL	PNP	16			100	2	500		50†	
2N555	MR	PNP	16				2	50		50†	
2N556	SYL CBS ETC	NPN	13				0.3	150	15†		45†
2N557	SYL CBS	NPN	17				0.3	200	20†		60†
2N558	SYL CBS	NPN	13				0.3	200	20†		60†
2N559	WE ETC	PNP	17				0.5	10	25†		75†
2N560	WE NAT NOR	NPN	13				4.5	10		50	
2N561	RCA ADA CLE CBS	PNP	16				1.5	1A		65	
2N563	GI ETC IND	PNP	11		2mA		4.5	1	10	25	35
2N564	GI IND ETC	PNP	13		2mA		4.5	1	10	25	35
2N565	GI ETC IND	PNP	11		2mA		4.5	1	30	55	90
2N566	GI IND ETC	PNP	13		2mA		4.5	1		15	
2N567	GI ETC IND	PNP	11				4.5	1	50	100	150
2N568	GI IND	PNP	13		2mA		4.5	1	50	100	150
2N569	GI IND	PNP	11		2mA		4.5	1	70	150	210

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
		14	15		100		2N530
5	1	14	15	100	100		2N531
5	1	14	15	100	100		2N532
5	1	14	15	100	100		2N533
			50	25	25		2N534
3	0.5	5	20	20	50		2N535
3	0.5	2	20	20	50		2N535A
3	0.5	0*	20	20	50		2N535B
			20	30	50		2N536
				100	225		2N537
			60	3.5A	20.0W†		2N538
			60	3.5A	10.0W†		2N538A
			55	3.5A	10.0W†		2N539
			55	3.5A	10.0W†		2N539A
			55	3.5A	20.0W†		2N540
			55	3.5A	20.0W†		2N540A
6	1	17	15		200		2N541
					200		2N541A
6	1	17	30		200		2N542
5	1	30*	30		200		2N542A
6	1	17	45		200		2N543
5	1	30*	45		200		2N543A
			18	10	80		2N544
				10	80		2N544/12
				10	80		2N544/13
			18	10	80		2N544/33
			60	800	600		2N545
			30		5.0W†		2N546
			60	800	600		2N547
			30	800	600		2N548
			60	800	600		2N549
			30		5.0W†		2N550
			60	200	600		2N551
			30		3.0W†		2N552
				4A	12.0W†		2N553
			28	5A	10.0W†		2N554
			30	3A	10.0W†		2N555
			20	200	100		2N556
			20	200	100		2N557
			10	200	100		2N558
			15	50	150		2N559
			60	100	500		2N560
			50	5A	50.0W†		2N561
5	1	16	25	300	150		2N563
5	1	16	25	300	120		2N564
5	1	16*	25	300	150		2N565
5	1	16	25	300	120		2N566
5	1	16	25	300	150		2N567
5	1	16	25	300	120		2N568
5	1	16	15	300	150		2N569

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
2N570	GI IND	PNP	13		2mA		4.5	1		30	
2N571	GI ETC IND	PNP	11		2mA		4.5	1		30	
2N572	GI IND ETC	PNP	13		2mA		1.5	1		30	
2N573	MR	PNP	17				12	2		150	
2N574	MH CBS	PNP	56				2	500		25†	
2N574A	MH CBS	PNP	56				2	500		25†	
2N575	MH CBS	PNP	56				2	500		25†	
2N575A	MH CBS	PNP	56				2	500		25†	
2N576	SYL ETC	NPN	13				0.4	400	20†	30†	60†
2N576A	SYL ETC	NPN	13				0.4	400	20†	30†	60†
2N578	RCA ADA IND ETC GI	PNP	13				0.3	400	10†	15†	30†
2N579	IND RCA ADA ETC TS	PNP	13				0.3	400	20†	30†	60†
2N580	ETC IND RCA ADA TS	PNP	13				0.3	400	30†	45†	90†
2N581	ETC IND RCA ADA TS	PNP	13				0.3	20	20†	30†	60†
2N582	RAY SYL RCA ADA TS	PNP	13				0.2	20	40†	60†	120†
2N583	RCA ADA AT	PNP	13				0.3	20	20†	30†	60†
2N584	IND RCA ADA ETC AT	PNP	13				0.2	20	40†	60†	120†
2N585	ETC SYL RCA GI AT	NPN	13				0.2	20	20†	40†	60†
2N586	RCA ADA ETC AT	PNP	11				0.5	250	35†	55†	90†
2N587	SYL TAD CBS	NPN	13				0.5	200	20†		60†
2N588	SC PCO SPR GI	PNP	13								
2N591	SYL RCA ADA ETC UST	PNP	13				6	1	50	70	
2N591/5	SYL	PNP	13				12	2		70	
2N592	TT GI	PNP	13				5	1		25	
2N593	GI	PNP	13				5	1		35	
2N594	GI TII	NPN	13				5	1		50	
2N595	GI TII	NPN	13				5	1		75	
2N596	GI TII	NPN	13				5	1		100	
2N597	PCO SC ETC TAD	PNP	13				1	100	40†	70†	120†
2N598	SC PCO ETC TAD	PNP	13				1	100	70†	125†	255†
2N599	SC PCO ETC TAD GI	PNP	13				1	100	100†	175†	300†
2N600	SC PCO	PNP	13				1	100	70†	125†	225†
2N601	SC PCO	PNP	13				1.5	100	100†	175†	
2N602	GT SYL TAD GI	PNP	17	20		1mA	1		20†	50†	80†
2N602A	GI	PNP	13				1		20†	50†	80†
2N603	GT SYL TAD GI	PNP	17	20		900 μA	1		30†		100†
2N604	GT SYL TAD GI	PNP	13	20		900 μA	1		40†		140†
2N605	GT	PNP	13				5	1		40	
2N606	GT	PNP	13				5	1		40	
2N607	GT	PNP	13				5	1		80	
2N608	GT	PNP	13				5	1		120	
2N609	WES ETC	PNP	13				10.5	700		90†	
2N610	WES ETC	PNP	13				10.5	100	35†	65†	105†
2N611	WES ETC	PNP	13				10.5	100	25†	45†	
2N612	WES ETC	PNP	13				10.5	0.5		34	
2N613	WES ETC	PNP	13				10.5	0.5		33	
2N614	WES ETC	PNP	13				10.5	0.5		45	
2N615	WES ETC	PNP	13				10.5	0.5		75	
2N616	WES ETC	PNP	13				10.5	0.5		28	
2N617	WES ETC	PNP	13				10.5	0.5		15	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	1	16	15	300	120		2N570
5	1	16	10	300	150		2N571
5	1	16	10	300	120		2N572
				250	200		2N573
				15A	25.0W†		2N574
				15A	25.0W†		2N574A
				30A	65.0W†		2N575
				15A	65.0W†		2N575A
			20	400	200		2N576
			20	400	200		2N576A
			14	400	120		2N578
				400	150		2N579
			14	400	120		2N580
			14	100	80		2N581
			14	100	120		2N582
			14	100	80		2N583
			14	100	120		2N584
			20	200	120		2N585
			45	250	250		2N586
			25	200	150		2N587
			15	50	30		2N588
			32	20	50		2N591
			32	100	55		2N591/5
5	1	16			150		2N592
5	1	8	20	300	150		2N593
5	1	8	20	300	150		2N594
5	1	8	15	300	150		2N595
5	1	8	10	300	150		2N596
			40	400	250		2N597
			35	400	250		2N598
			20	400	250		2N599
			35	400	500†		2N600
			20	400	500†		2N601
5	1	14	20	10	120		2N602
				10	120		2N602A
5	1	14	20	10	120		2N603
5	1	14	20	10	120		2N604
			15		120		2N605
			15		120		2N606
			15		120		2N607
			15		120		2N608
			20	200	180		2N609
			20	200	180		2N610
			20	200	180		2N611
			20	150	180		2N612
			20	200	180		2N613
			15	150	125		2N614
			15	100	125		2N615
			15	150	125		2N616
			20	150	125		2N617

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N618	MR CLE CBS BEN	PNP	16				4	1A	60†	90†	140†
2N619	RAY	NPN	13				1.5	5	9†	15†	22†
2N620	RAY	NPN	13				1.5	5	18†	30†	44†
2N621	RAY	NPN	13				1.5	5		50	
2N622	RAY	NPN	13				1.5	0.5		22	
2N623	TII	PNP	9				6	2		35	
2N624	SYL	PNP	9				10	2	20		
2N625	SYL	NPN	13				1.5	50	30†	50†	
2N626	ADV	NPN					5	1A	18k		
2N627	MR CBS BEN	PNP	16				12	500		60	
2N628	MR CBS BEN	PNP	16				12	500		60	
2N629	MR CBS BEN	PNP	16				12	500		60	
2N630	MR CBS BEN	PNP	16				12	500		60	
2N631	MR RAY ETC UST IND	PNP	17	3	20 μ A	50 μ A	6	10	75	150	225
2N632	MR RAY IND ETC UST	PNP	17	3	20 μ A	50 μ A	6	10		100	
2N633	RAY IND UST	PNP	17	3	20 μ A	50 μ A	6	10		60	
2N634	CBS GE ETC	NPN	13				0.75	200	15†		45†
2N634A	GE ETC TAD	NPN	13					200	15†		45†
2N635	CBS ETC GE	NPN	13				0.75	200	25†		75†
2N635A	GE ETC TAD	NPN	17					200	25†		75†
2N636	CBS GE	NPN	13				0.75	200	35†		105†
2N636A	GE SYL TAD	NPN	17				1	10	100†	190†	300†
2N637	BEN CLE CBS	PNP	16				4.5	500		75	
2N637A	BEN CLE CBS	PNP	16				4.5	500		75	
2N637B	CLE BEN CBS	PNP	16				4.5	500		75	
2N638	BEN CLE CBS	PNP	16				4.5	500		90	
2N638A	BEN CLE CBS	PNP	16				4.5	500		90	
2N638B	BEN CLE CBS	PNP	16				4.5	500		90	
2N639	BEN CLE CBS	PNP	16				6	500		37	
2N639A	BEN CLE CBS	PNP	16				6	500		37	
2N639B	BEN CLE CBS	PNP	16				6	500		37	
2N640	RCA	PNP	3				12	1		60	
2N641	RCA	PNP	3				12	1		60	
2N642	RCA	PNP	3				12	1		60	
2N643	RCA SYL AT GT TAD	PNP	13				7	5	20†	45†	
2N644	RCA AT SYL TAD	PNP	13				7	5	20†	45†	
2N645	RCA SYL AT TAD	PNP	13				7	5	20†	45†	
2N646	GE	NPN	17								
2N647	RCA ADA ETC GE	NPN	13				1	50	35†	70†	105†
2N649	RCA ETC	NPN	13				1	50	35†	65†	105†
2N650	UST SYL ETC MR BEN	PNP	13				6	1	30	40	70
2N650A	MR ETC TII	PNP	13				6	1	30	50	70
2N651	UST SYL ETC MR BEN	PNP	13				6	1	50	75	125
2N651A	MR ETC TII	PNP	13				6	1	50	85	120
2N652	UST SYL ETC MR	PNP	13				6	1	100	160	250
2N652A	MR ETC TII	PNP	13				6	1	100	150	225
2N653	UST SYL ETC MR	PNP	13				6	1	30	40	70
2N654	UST ETC MR	PNP	13				6	1	50	75	125
2N655	UST ETC MR	PNP	13				6	1	100	160	250
2N656	TT TII RHE NAT RAY	NPN	17	60		250 μ A	10	200	30†	50†	80†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			16	3A	45.0W†		2N618
5	1	15	40	50	240		2N619
5	1	15	35	50	380		2N620
5	1	15	30	50	250		2N621
		8	30	50	250		2N622
			15		40		2N623
			20	10	100		2N624
			30	10	2.5W		2N625
				3A	10.0W†		2N626
			30	10A	50.0W†		2N627
			45	10A	50.0W†		2N628
			60	10A	50.0W†		2N629
			75	10A	50.0W†		2N630
			20	100	140		2N631
			24	100	140		2N632
			20	100	140		2N633
			20	300	150		2N634
			25	300	150		2N634A
			20	300	150		2N635
			25	300	150		2N635A
			15	300	150		2N636
			15	300	150		2N636A
			40	5A	25.0W†		2N637
			70	5A	25.0W†		2N637A
			80	5A	25.0W†		2N637B
			40	5A	25.0W†		2N638
			70	5A	25.0W†		2N638A
			80	5A	25.0W†		2N638B
			40	5A	25.0W†		2N639
			70	5A	25.0W†		2N639A
			80	5A	25.0W†		2N639B
				10	80		2N640
				10	80		2N641
				10	80		2N642
			29	100	120		2N643
			29	100	120		2N644
			29	100	120		2N645
				50	100		2N646
			25	50	100		2N647
			18	50	100		2N649
4.5	0.5	10	30	250	200		2N650
4.5	0.5	3	30	500	200		2N650A
4.5	0.5	10	30	250	200		2N651
4.5	0.5	3	30	500	200		2N651A
4.5	0.5	10	30	250	200		2N652
4.5	0.5	3	30	500	200		2N652A
				250	200		2N653
4.5	0.5	10	25	25	200		2N654
4.5	0.5	10	25	250	200		2N655
10	0.3	5	60	500	800		2N656

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N656A	GE SSP	NPN	13	100	250 μ A		10	200	30†	50†	90†
2N657	FC TT TII RHE NAT	NPN	17				10	200	30†	50†	90†
2N657A	GE SSP	NPN	17				10	200	30†	50†	90†
2N658	RAY ETC TII	PNP	13				0.35	50	25†	50†	80†
2N659	RAY ETC GI TII	PNP	13				0.35	50	40†	70†	115†
2N660	RAY ETC KSC TAD	PNP	13				0.35	50	60†	90†	160†
2N661	RAY ETC KSC TAD	PNP	13				0.35	50	80†	120†	
2N662	RAY ETC KSC TAD	PNP	13				0.35	50	30†	70†	
2N663	DEL	PNP	16				2	500	25†		75†
2N665	DEL CBS BEN	PNP	16				3	500	40†		80†
2N669	MR CLE DEL CBS	PNP	16				2	500			250†
2N670	PCO SC	PNP	13				1.5	1A	40†	100†	250†
2N671	PCO SC	PNP	13				1.5	1A	40†	100†	250†
2N672	PCO SC	PNP	13								
2N673	PCO SC	PNP	13								
2N674	PCO	PNP	13				1.5	1A	40†	100†	250†
2N675	PCO SC	PNP	13				1.5	1A	40†	100†	250†
2N676	ADV	PNP	13								
2N677	BEN SYL CBS	PNP	16				2	500		115	
2N677A	BEN GEM SYL CBS	PNP	16				2	500		115	
2N677B	BEN GEM SYL CBS	PNP	16				2	500		115	
2N677C	BEN GEM SYL CBS	PNP	16				2	500		115	
2N678	BEN CBS	PNP	16				1.5	500		160	
2N678A	BEN SYL CBS	PNP	16				1.5	100		200	
2N678B	BEN SYL CBS	PNP	16				1.5	100		200	
2N678C	BEN CBS	PNP	16				1.5	500		160	
2N679	SYL ST TAD CBS	NPN	17				0.5	30	20†		
2N680	TII ETC	PNP	5					200	15	35	45
2N694	WE	NPN	17				6	2	9	20	
2N695	MR	PNP	9		75	100	0.3	10	25†	40†	
2N696	UST IND TII PSI RHE	NPN	17								
2N696A	RHE	NPN	17				10	5		45	
2N697	TII SYL UST PSI RAY	NPN	17				5	1	30	70	
2N697A	RHE	NPN	17				5	1	30	70	
2N698	CDC RHE NOR SP TT HA	NPN	17				5	1	35	75	100
2N699	RAY UST NAT RHE NOR	NPN	17				5	1	35	75	100
2N699A	RHE	NPN	17				10	5		70	
2N699B	FC	NPN	17				5	1	35	70	100
2N700	MR	PNP	9				6	2	4	10	
2N700/18	SYL	PNP	9				6	2	4		
2N700A	MR	PNP	9				6	5			50
2N701	MR		9							30	
2N702	TII NAT GI PSI	NPN	13	20		10 μ A	5	10	20†		60†
2N703	TII NAT GI PSI SYL	NPN	17	20		10 μ A					
2N705	RAY TII RCA SYL MR	PNP	13				0.3	10	25†	40†	
2N705A	MR SYL RAY GE	PNP	13				0.3	10	25†	40†	
2N706	TII IND MULL CLE GE	NPN	17								
2N706/46	SYL	NPN	17								
2N706/51	SYL	NPN	81								
2N706A	TII TIL RCA AT GE HA	NPN	17								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			60	500	1.0W		2N656A
			100	500	800		2N657
			100	500	1.0W		2N657A
			16	1A	175		2N658
			16	1A	175		2N659
			11	1A	175		2N660
			9	1A	175		2N661
			14	1A	175		2N662
			25	4A			2N663
				5A			2N665
			30	3A	10.0W†		2N669
			40	2A	300		2N670
			40	2A	1.0W†		2N671
			25	2A	300		2N672
			25	2A	1.0W†		2N673
			75	2A	300		2N674
			75	2A	1.0W†		2N675
			75	3A	1.0W		2N676
			30	1.5A	50.0W†		2N677
			40	15A	50.0W†		2N677A
			70	15A	50.0W†		2N677B
			80	15A	50.0W†		2N677C
			30	15A	50.0W†		2N678
			40	15A	50.0W†		2N678A
			70	15A	50.0W†		2N678B
			80	15A	50.0W†		2N678C
			20	200	150		2N679
				50	150		2N680
				50	100		2N694
			15	50	75		2N695
			40	500	600		2N696
					800		2N696A
			40	500	600		2N697
					800		2N697A
			80	500	600		2N698
			80	500	600		2N699
					800		2N699A
			80		870		2N699B
			20	50	75		2N700
			20	50	75		2N700/18
					75		2N700A
				75			2N701
			25	50	150		2N702
			25	100	300		2N703
			15	50	150		2N705
			15	100	150		2N705A
			20	100	300		2N706
			20	200	300		2N706/46
			20	200	300		2N706/51
			20	50	300		2N706A

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N706A/46	SYL	NPN	17								
2N706A/51	SYL	NPN	81								
2N706B	SYL PSI NAT CLE HA	NPN	17								
2N706B/46	SYL	NPN	17								
2N706B/51	SYL	NPN	81								
2N706C	SC SYL	NPN	17								
2N706M	MR	NPN	17				1	10	20†		120†
2N707	MR BC CLE HA FC	NPN	17				1	10	9†	12†	
2N707A	MR	NPN	13				1	10	9†	30†	50†
2N708	TT TH GE GI MR HA	NPN	13				1	0.5	15†	50†	
2N708/46	SYL	NPN	17				1.0	0.5	15		
2N708/51	SYL	NPN	81				1.0	0.5	15†		
2N709	FC AM TII RCA HA	NPN	13								
2N709/46	SYL	NPN	17								
2N709/51	SYL	NPN	81								
2N709A	SYL	NPN	17				0.5	10	30†		90†
2N709A/46	SYL	NPN	17				0.5	10	30†		90†
2N709A/51	SYL	NPN	81				0.5	10	30†		90†
2N710	RAY TII RCA SYL MR	PNP	13				0.5	10	25†	40†	
2N710A	RAY	PNP	17				0.5	10	25†	34†	
2N711	RCA TIL TII GE RAY	PNP	13				0.5	10	20†	30†	
2N711A	TII RAY SYL	PNP	9/17				0.5	10	25†		150†
2N711B	TII SYL	PNP	9/17				0.5	10	30†		150†
2N715	TII TIL NAT	NPN	13				10	15	10†		50†
2N716	TII TIL NAT	NPN	13				10	15	10†		50†
2N717	RHE NAT ME CDC HA	NPN	17								
2N718	RHE NAT GE ME CDC HA	NPN	17								
2N718A	CDC AM ME GE HA FC	NPN	17				10	5	35	70	150
2N719	FC ME CDC GE HA	NPN	17				5	1	15		
2N719A	GE FC ME AM CDC HA	NPN	17				5	1	15		
2N720	FC ME CDC MH RAY	NPN	17				5	1	30		90
2N720A	FC GE ME AM CDC EA	NPN	17				5	1	30		90
2N721	FC TT TII HA	PNP	17				5	1	15†		50†
2N722	TII FC HA	PNP	17				5	1	25†		100†
2N722A	RAY	NPN	17								
2N725	SYL GE	PNP	17				0.5	10	20†		
2N726	TII TIL	PNP	9	15		5 μ A	10	10	15		90
2N727	TIL TII	PNP	9				10	10	30		240
2N728	TT	NPN	13				6	10	20†	40†	
2N729	TT	NPN	13				6	10	20†	40†	
2N730	HOF RHE TII MH	PNP	16				10	150	20†	40†	60†
2N731	HOF RHE TII MH	NPN	16				10	150	40†	80†	120†
2N734	NAT TT TII CSF	NPN	17				5	5	20	30	50
2N735	NAT TT TII CSF SP	NPN	17				5	5	40	60	100
2N735A	SP TH	NPN	17				5	5	40	75	100
2N736	RHE CT TII NAT CSF	NPN	17				5	5	80	120	200
2N736A	TII SP TIF	NPN	9				5	5	80		200
2N736B	SP TH	NPN	17				5	5	80	130	200
2N738	TII AM TT CSF	NPN	17				5	5	20	30	50
2N739	TII AM TT CSF	NPN	17				5	5	40	60	100

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
10	0.3	6	15	200			2N706A/46
			15	200			2N706A/51
			20	50	300		2N706B
			15	200			2N706B/46
			15	200			2N706B/51
			20	200	360		2N706C
			15	15A	300		2N706M
			28	200	300		2N707
					1.2W		2N707A
			20	200	360		2N708
			15		400		2N708/46
			15		300		2N708/51
			6		300		2N709
			6		300		2N709/46
			6		300		2N709/51
			6		300		2N709A
			6		300		2N709A/46
			6		300		2N709A/51
			15	50	150		2N710
			15	50	150		2N710A
			12	50	150		2N711
			7	100	150		2N711A
			7	100	150		2N711B
			35		500		2N715
			40		500		2N716
			40	500	400		2N717
			40	500	400		2N718
			32	500	500		2N718A
			80	500	400		2N719
			60	500	500		2N719A
			80	500	400		2N720
			80	500	500		2N720A
					300		2N721
					300		2N722
			35		400		2N722A
				50	150		2N725
			20	50	300		2N726
			20	50	300		2N727
			15		500		2N728
			30		500		2N729
			40	1A	500		2N730
			40	1A	500		2N731
			60	500	500		2N734
			60	500	500		2N735
			60		500		2N735A
			60	500	500		2N736
			60	100	500		2N736A
			60		500		2N736B
			80		500		2N738
			80		500		2N739

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N739A	SP	NPN	17				5	5	40†		100†
2N740	TII AM TT CSF SP	NPN	17				5	5	80	120	200
2N740A	SP	NPN	17				5	5	80†		200†
2N741	MR SYL	PNP	13				6	5	20		
2N741A	SYL	PNP	13				6	5	20		
2N742	NAT	NPN	13				5	100	20†		
2N742A	NSC	NPN	17				0.5	10	25†		
2N743	STC TII SYL BC CLE	NPN	9/17				0.35	10	20†	40†	60†
2N743/46	SYL	NPN	17				0.35	10	20†		60†
2N743/51	SYL	NPN	81				0.35	10	20†		60†
2N744	STC TII SYL BC CLE	NPN	9/17				0.35	10	40†	80†	120†
2N744/46	SYL	NPN	17				0.35	10	40†		120†
2N744/51	SYL	NPN	81				0.35	10	40†		120†
2N745	RAY	NPN	86				20	1	19	35	55
2N746	RAY	NPN	86				20	1	39	99	
2N747	RAY	NPN	86				5	10	35†	45†	90†
2N748	RAY	NPN	86				5	10	20†	30†	40†
2N749	RAY	NPN	86								
2N750	RAY	NPN	86								
2N751	RAY	NPN	86								
2N752	NAT	NPN	13				10	1	40		120
2N753	TII TIL FC NAT MULL	NPN	13				1	10	40†	80†	120†
2N753/46	SYL	NPN	17				1	10	40†		120†
2N753/51	SYL	NPN	81				1	10	40†		120†
2N754	TT NAT	NPN	13				10	5		50†	
2N755	TT NAT	NPN	13				10	5		50†	
2N756	NAT	NPN	13				5	1	12	18	22
2N756A	NAT TT	NPN	13				5	1	12	18	22
2N757	NAT	NPN	13				5	1	18	30	40
2N757A	NAT TT	NPN									
2N758	NAT	NPN	13				5	1	18	50	90
2N758A	NAT TT	NPN									
2N758B	SP	NPN	17				5	1	18†		90†
2N759	NAT GE	NPN	13				5	1	36	65	90
2N759A	NAT TT SP	NPN					5	1	36		90
2N759B	SP	NPN	17				5	1	36†		90†
2N760	NAT TII AM GE	NPN	13				5	1	76	150	333
2N760A	NAT TII AM SP TI SP	NPN	13				5	1	76		333
2N760B	SP	NPN	17				5	1	76		333
2N761	NAT	NPN	13				20	1	19		
2N762	NAT	NPN	13				20	1	39		
2N768	PCO SPR	PNP	13				0.2	2		40†	
2N769	PCO SPR	PNP	13				0.5	20		55†	
2N770	PCO	NPN	13				1	20		25†	
2N771	PCO	NPN	13				1	20		50†	
2N772	PCO	NPN	13				5	10		35	
2N773	PCO	NPN	13				10	2		35	
2N774	PCO	NPN	13				10	2		20	
2N775	PCO	NPN	13				10	2		50	
2N776	PCO	NPN	13				10	2		11	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			80				2N739A
			80		500		2N740
			80		500		2N740A
			15	100	150		2N741
			20	100	150		2N741A
			60	100	500		2N742
							2N742A
			20	200	300		2N743
			12	200			2N743/46
			12	200			2N743/51
			20	200	300		2N744
			12	200			2N744/46
			12	200			2N744/51
			30	20	155		2N745
			30	20	155		2N746
			25	50	200		2N747
			30	50	200		2N748
			45	50	200		2N749
			50	50	200		2N750
			20	50	200		2N751
			45	100	500		2N752
			20	200	300		2N753
			15	50			2N753/46
			15	50			2N753/51
				50	300		2N754
				50	300		2N755
				100	500		2N756
					500		2N756A
				100	500		2N757
					500		2N757A
				100	500		2N758
					500		2N758A
			60		500		2N758B
			45	100	500		2N759
			60		500		2N759A
			60		500		2N759B
			45	100	500		2N760
			60		500		2N760A
			60		500		2N760B
				100	500		2N761
				100	500		2N762
				100	35		2N768
				100	35		2N769
				100	150		2N770
				100	150		2N771
				100	150		2N772
				100	150		2N773
				100	150		2N774
				100	150		2N775
				100	150		2N776

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N777	PCO	NPN	13				10	2		20	
2N778	PCO	NPN	13				10	2		50	
2N779	PCO SPR RAY	PNP	13				0.5	10		90†	
2N779A	PCO SPR	PNP	13				0.5	10	50†	90†	200†
2N779B	PCO	PNP	13				0.5	10	50†	125†	200†
2N780	TII	NPN	17	5		5nA	5	0.5	35†	80†	140†
2N781	SYL GE RAY	PNP	17				0.22	10	25†	45†	
2N782	SYL GE RAY	PNP	17				0.25	10	20†	40†	
2N783	SYL GI	NPN	17				1	10	20†		80†
2N784	SYL GI	NPN	17				1	10	25†		
2N784A	SYL	NPN	17				1	10	25†		150†
2N784A/46	SYL	NPN	17				1	10	25†		150†
2N784A/51	SYL	NPN	81				1	10	25†		150†
2N789	RAY	NPN	125				5	1	9		20
2N790	RAY	NPN	125				5	1	18		40
2N791	RAY	NPN	125				5	1	18		90
2N792	RAY	NPN	125				5	1	36		88
2N793	RAY	NPN	125				5	1	78		88
2N794	RCA	PNP	13				0.3	10		50†	
2N795	RCA	PNP	13				0.3	10		50†	
2N796	RCA	PNP	13				0.3	10		75†	
2N797	TII	NPN	17				0.5	50	40†	85†	
2N799	RAY	PNP	86				0.15		30†	60†	
2N800	RAY	PNP	106				0.15			60†	
2N801	RAY	PNP	86				0.25		30†	40†	60†
2N802	RAY	PNP	106				0.35	100		36†	
2N803	RAY	PNP	86				0.25		40†	55†	80†
2N804	RCA RAY	PNP	106				0.36	50		75†	
2N805	RAY	PNP	86				0.25		60†	80†	
2N806	RAY	PNP	106				0.35	100		85†	
2N807	RAY	PNP	86				0.2	20	40†	60†	
2N808	RAY	PNP	106				0.2	20	40†	60†	
2N809	RAY	PNP	86				6	1		60	
2N810	RAY	PNP	106				6	1		60	
2N811	RAY	PNP	86				6	1		80	
2N812	RAY	PNP	106				6	1		80	
2N813	RAY	PNP	86				6	1		140	
2N814	RAY	PNP	106				6	1		140	
2N815	RAY	NPN	86				0.75	200	30†	80†	
2N816	RAY	NPN	106				0.5	30	60†	110†	180†
2N817	RAY	NPN	86				1	50	20†	25†	
2N818	RAY	NPN	106				1	50	20†	25†	
2N819	RAY	NPN	86				1	50	30†	45†	
2N820	RAY	NPN	106				1	50	30†	45†	
2N821	RAY	NPN	86				1	50	40†	70†	
2N822	RAY	NPN	106				1	50	40†	70†	
2N823	RAY	NPN	86				0.25	20	40†		
2N824	RAY	NPN	106				0.25	20	40†		
2N825	RAY	PNP	86				1	10	30†		150†
2N826	RAY	PNP	106				1	10	30†		150†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
				100	150		2N777
				100	150		2N778
				50	60		2N779
					60		2N779A
			15	100	150		2N779B
5	30μA	3*	45	50	300		2N780
			15	200	150		2N781
			15	200	150		2N782
			20	200	300		2N783
			15	200	300		2N784
			15	200	360		2N784A
			15	200	350		2N784A/46
			15	200	300		2N784A/51
5	1	20		25	200		2N789
5	1	20		25	200		2N790
5	1	20		25	200		2N791
5	1	20		25	200		2N792
5	1	20		25	200		2N793
				100	150		2N794
				100	150		2N795
			7	150	150		2N797
				100	150		2N796
			24	100	70		2N799
			24	100	75		2N800
			18	400	70		2N801
			18	400	75		2N802
			15	400	70		2N803
			15	400	75		2N804
			12	100	70		2N805
			12	400	75		2N806
			14	100	70		2N807
			14	100	75		2N808
			15	400	70		2N809
			15	200	75		2N810
			12	200	70		2N811
			12	200	75		2N812
			10	200	70		2N813
			10	200	75		2N814
			20	200	70		2N815
			20	1A	75		2N816
			25	400	70		2N817
			25	400	75		2N818
			20	400	70		2N819
			20	400	75		2N820
			15	400	70		2N821
			15	400	75		2N822
			24	100	75		2N823
			24	100	75		2N824
			20	100	70		2N825
			20	200	75		2N826

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N827	MR	PNP	17				0.3	10	100†	150†	
2N828	RAY RCA SYL GE PSI	PNP	13				0.3	10	25†	40†	
2N828A	MR	PNP	17				0.3	10	25†	40†	
2N829	MR	PNP	17				0.3	10	50†	80†	
2N834	BC SYL MR	NPN	9				1	10	25†		
2N834/46	SYL	NPN	17				1	10	25†		
2N834/51	SYL	NPN	81				1	10	25†		
2N835	BC	NPN	17				1	10	20†		
2N837	RAY	PNP	17				0.5	10	30†		
2N838	MR	PNP	17				0.3	10	30†	70†	
2N839	TT CDC	NPN	13				5	1	20	35	45
2N840	TT CDC	NPN	13				5	1	40	70	90
2N841	TT CDC	NPN	13				5	1	80	140	330
2N842	TT	NPN	13				5	1	20	40	
2N843	TT	NPN	13				5	1	40		
2N844	TT	NPN	13				10	1		80	
2N845	TT	NPN	13				10	1		80	
2N846	PCO SPR	PNP	13				0.5	50		35†	
2N846A	PCO SPR	PNP	17				0.5	50		35†	
2N849	TII	NPN	81				1	10			
2N850	TII	NPN	81				1	10			
2N851	TII	NPN	81				0.25	1	10†		
2N852	TII	NPN	81				0.25	1	20†		
2N858	PCO	PNP	13				0.5	5		20†	
2N859	PCO	PNP	17				0.5	5		35†	
2N860	PCO	PNP	13				0.5	5		20†	
2N861	PCO	PNP	13				0.5	5		35†	
2N862	PCO	PNP	13				0.5	5		20†	
2N863	PCO	PNP	13				0.5	5		35†	
2N864	PCO	PNP	13				0.5	5		35†	
2N865	PCO	PNP	13				0.5	5		75†	
2N869	FC	PNP	13				5	10	20†		
2N870	ME AM CEC TII	NPN	17				5	1	30		100
2N871	ME AM CDC GE HI	NPN	17				10	0.1	20†		
2N902	RAY	NPN	88				5	1	9		20
2N903	RAY	NPN	88				5	1	18		40
2N904	RAY	NPN	88				5	1	18		90
2N905	RAY	NPN	88				5	1	36		88
2N906	RAY	NPN	88				5	1	78		330
2N907	RAY	NPN	88				20	1	30	47	80
2N908	RAY	NPN	88				20	1	39	99	
2N909	FC	NPN	13				10	50	110†		350†
2N910	ME AM TII GE HA	NPN	17				5	1	76	125	200
2N911	ME AM TII GE HA	NPN	17				5	1	36	65	90
2N912	ME AM GE HA SC	NPN	17				5	1	18	38	50
2N914	ME MR RCA TH TT CLE	NPN	17								
2N914/46	SYL	NPN	17								
2N914/51	SYL	NPN	81								
2N915	ME GE FC	NPN	17				5	1	40	115	200
2N916	TII ME GE FC	NPN	17				5	1	40	100	200

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			15	100 200	150 150 150 150		2N827 2N828 2N828A 2N829
			30	200	300		2N834
			30	200			2N834/46
			30	200			2N834/51
				200	300		2N835
			6	100	150		2N837
				200	150		2N838
	15		45	50	300		2N839
			45	50	300		2N840
			45	50	300		2N841
			45	50	300		2N842
			45	50	300		2N843
			60	50	300		2N844
			80	50	300		2N845
				50	60		2N846
				50	60		2N846A
			15	50	300		2N849
			15	50	300		2N850
			12	200	300		2N851
			12	200	300		2N852
			40	50	150		2N858
			40	50	150		2N859
			20	50	150		2N860
			25	50	150		2N861
			15	50	150		2N862
			15	50	150		2N863
			6	50	150		2N864
			10	50	150		2N865
			18		1.2W		2N869
			60	500	500		2N870
			60	500	500		2N871
5	1	20	45	25	150		2N902
5	1	20	45	25	150		2N903
5	1	20	45	25	150		2N904
5	1	15		25	150		2N905
5	1	20	45	25	150		2N906
			30	20			2N907
			30	20			2N908
			30		400		2N909
10	0.3	12*	60		500		2N910
10	0.3	15*	60	500	500		2N911
10	0.3	18*	60	500	500		2N912
			20	200	300		2N914
			15		400		2N914/46
			15		300		2N914/51
			50		360		2N915
			25		360		2N916

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N917	FC GE AM	NPN	9				1	3	20†	50†	
2N918	COS AM TII FC SYL GE	NPN	9				1	3	20†	50†	
2N918/51	SYL	NPN	81				1	3	20†		
2N919	PSI MULL BC CLE	NPN	13				1	10	20†	40†	60†
2N920	PSI MULL BC CLE	NPN	13				1	10	40†	80†	120†
2N921	PSI MULL BC CLE	NPN	13				1	10	20†	40†	60†
2N922	PSI BC CLE	NPN	13				1	10	40†	80†	120†
2N923	NAT	PNP	17				6	1	12		30
2N924	NAT	PNP	17				6	1	24		60
2N925	NAT	PNP	17				6	1	10		24
2N926	NAT	PNP	17				6	1	20		55
2N927	NAT	PNP	17				6	1	8		22
2N928	NAT	PNP	17				6	1	18		50
2N929	STC TII AM GE FC	NPN	17	5		2nA	5	1	60	200	350
2N929A	SP	NPN	17				5	10 μ A	40†		120†
2N930	STC TII AM GE MULL	NPN	17	5		2nA	5	1	150	350	600
2N930A	NSC SP	NPN	17				5	10 μ A	100†		300†
2N934	RCA	PNP	17				0.3	40	40†		
2N935	SP NAT	PNP	17				5	1	9†		22†
2N936	SP NAT	PNP	17				5	1	18†		44†
2N937	SP CRY NAT	PNP	17				5	1	36†		88†
2N938	SPR SP CRY	PNP	17				6	1	9	15	22
2N939	SPR SP CRY	PNP	17				6	1	18	30	44
2N940	SPR SP CRY	PNP	17				6	1	36	60	88
2N941	SP	PNP	17				6	1	25	50	
2N942	SP	PNP	17				6	1	25	50	
2N943	SP CRY	PNP	13								
2N944	SP CRY	PNP	13								
2N945	SPR SP CRY	PNP	17								
2N946	SP SPR CRY	PNP	17								
2N947	SGS	NPN	13				5	10	30		
2N955	RCA	NPN	13				0.5	30	30†	60†	
2N955A	RCA	NPN	13				0.3	30	30†	50†	
2N956	FC SGS AM GE HA TH	NPN	13				5	1	50	115	200
2N957	FC	NPN	13				5	10	45†		
2N960	RAY GE TII MR SYL	PNP	17				0.3	10	20†	40†	
2N961	RAY GE TII MR SYL	PNP	17				0.3	10	20†	40†	
2N962	RAY GE TII SYL MR	PNP	17				0.3	10	20†	40†	
2N963	TII SYL RAY	PNP	17				0.3	10	20†		
2N964	RAY GE TII SYL MR	PNP	17				0.3	10	40†	70†	
2N964A	MR	PNP	17				0.3	10	40	80†	
2N965	RAY GE TII MR SYL	PNP	17				0.3	10	40†	70†	
2N966	RAY GE TII MR SYL	PNP	17				0.3	10	40†	70†	
2N967	TII SYL RAY	PNP	17				0.3	10	40†		
2N968	MR TII RAY	PNP	17				0.5	10	17†	35†	
2N969	MR TII RAY	PNP	17				0.5	10	17†	35†	
2N970	MR TII RAY	PNP	17				0.5	10	17†	35†	
2N971	MR TII RAY	PNP	17				0.5	10	17†		35†
2N972	MR TII RAY	PNP	17				0.5	10	40†	75†	
2N973	MR TII RAY	PNP	17				0.5	10	40†	75†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
			15		200		2N917
			15	50	200		2N918
			15	50	200		2N918/51
			15	220	360		2N919
			15	220	360		2N920
			25	200	360		2N921
			25	200	360		2N922
				50	150		2N923
				50	150		2N924
				50	150		2N925
				50	150		2N926
				50	150		2N927
				50	150		2N928
5	10μA	4*	45	30	300		2N929
			45	45	500		2N929A
5	10μA	2	45	30	300		2N930
5	10μA	3*		45	500		2N930A
			13		150		2N934
5	1	18	40	50	385		2N935
5	1	18	35	50	385		2N936
5	1	18	30	50	385		2N937
6	1	25*	35		250		2N938
6	1	25*	35		250		2N939
6	1	25*	35	100	250		2N940
			8	50	250		2N941
			8	50	250		2N942
			18	50	250		2N943
			18	50	250		2N944
			50	50	250		2N945
			80	50	250		2N946
					360		2N947
			11	100	150		2N955
			8	150	150		2N955A
10	0.3	8*	50	500	500		2N956
			20		250		2N957
			15	150	150		2N960
			12	150	150		2N961
			12	150	150		2N962
			7	100	150		2N963
			15	150	150		2N964
				100	150		2N964A
			12	150	150		2N965
			12	150	150		2N966
			7	100	150		2N967
			6	200	150		2N968
			6	200	150		2N969
			6	200	150		2N970
			6	200	150		2N971
			6	200	150		2N972
			6	200	150		2N973

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N974	MR TII RAY	PNP	17				0.5	10	40†	75†	
2N975	MR TII RAY	PNP	17				0.5	10	40†	75†	
2N976	PCO	PNP	13				0.5	20	30†	80†	
2N978	TII TT	PNP	17								60
2N979	SPR	PNP	13				0.5	40	20†	50†	
2N982	SPR	PNP	13				0.5	10	50†	100†	
2N983	SPR	PNP	13				0.5	10	40†	85†	
2N984	SPR	PNP	13				0.5	10	20†	70†	
2N985	TII SYL RAY	PNP	17				0.5	100	60†		
2N986	FC	NPN	17								
2N990	AMP	PNP	9				6	1	40		150
2N992	AMP		9				6	1		150	
2N993	AMP	PNP	9				6	1	40		150
2N994	AMP RAY	PNP	17				0.25	10	45†		140†
2N995	FC	PNP	17								
2N996	SGS FC	PNP	17				5	1		70	
2N997	TII	NPN	17				10	10	4000†		
2N998	AM FC	NPN	100				5	1	800	1200	
2N999	GE	NPN	100								
2N1000	GT CBS SYL	NPN	13			300	0.5	10	40†		
2N1007	BEN CBS	PNP	16				14	500		50†	
2N1008	BEN SYL ETC	PNP	13				4.5	10	40	90	150
2N1008A	BEN SYL ETC	PNP	13				4.5	10	40	90	150
2N1008B	BEN ETC	PNP	13				4.5	10	40	90	150
2N1009	SYL	PNP	13				10	10	40		
2N1010	RCA ADA ETC	NPN	13				3	0.3		35	
2N1011	DEL MR BEN	PNP	16				2	1A			150†
2N1012	CBS GI ETC TAD	NPN	13				5	10		40†	60†
2N1013	MH	PNP									
2N1014	RCA CBS	PNP	16				1.5	1A		75	
2N1015	WES AMF SEC SIL	NPN	67				2	500	20†		
2N1015A	WES AMF SEC SIL	NPN	67				2	500	20†		
2N1015B	WES AMF SEC SIL	NPN	67				2	500	20†		
2N1015C	WES AMF SEC SIL	NPN	67				2	500	20†		
2N1015D	WES SIL	NPN	67				1	500	20†		
2N1015E	WES SIL	NPN	67				2	500	20†		
2N1015F	WES	NPN	67				2	500	20†		
2N1016	WES AMF SEC SIL	NPN	67				2	500	25†		
2N1016A	WES AMF SEC SIL	NPN	67				5	500	25†		
2N1016B	WES AMF SEC SIL	NPN	67				2	500	25†		
2N1016C	WES AMF SIL	NPN	67				2	500	25†		
2N1016D	WES SIL	NPN	67				2	500	25†		
2N1016E	WES SIL	NPN	67				2	500	25†		
2N1016F	WES	NPN	67				2	500	25†		
2N1017	RAY IND ETC TAD KSC	PNP	13				0.25	10	70†	100†	
2N1018	RAR CPC ETC KSC TAD	PNP	13				0.25		70†	140†	
2N1021	TII DEL CBS	PNP	16				1.5	500	10†	23†	
2N1021A	DEL TII	PNP	16				1.5	1A	40†	100†	
2N1022	TII DEL CBS	PNP	16				1.5	500	10†	23†	
2N1022A	DEL TII	PNP	16				1.5	1A	40†	100†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
10	0.1	6*	6	200	150		2N974
			6	200	150		2N975
			15	100	100		2N976
			20		330		2N978
			20	100	60		2N979
			15	100	60		2N982
			15	100	60		2N983
			15	100	60		2N984
			7	200	150		2N985
			60		500		2N986
			32	10	100		2N990
				10	67		2N992
				10	100		2N993
			6	150	200		2N994
			12		360		2N995
			12		360		2N996
			40	300	500		2N997
			60		500		2N998
					500		2N999
			30		150		2N1000
3	0.3	5*	30	3A			2N1007
			20	300	400		2N1008
			40	300	400		2N1008A
			60	300	400		2N1008B
			25	20	150		2N1009
			10	2	20		2N1010
			40	5A	10.0W†		2N1011
			22		150		2N1012
					750		2N1013
			60	10A	50.0W†		2N1014
			30	5A	150.0W†		2N1015
			60	5A	150.0W†		2N1015A
			100	5A	150.0W†		2N1015B
			150	5A	150.0W†		2N1015C
			200	5A	150.0W†		2N1015D
			250	5A	150.0W†		2N1015E
			300	5A	150.0W†		2N1015F
			30	5A	150.0W†		2N1016
			60	5A	150.0W†		2N1016A
			100	5A	150.0W†		2N1016B
			150	5A	150.0W†		2N1016C
			200	5A	150.0W†		2N1016D
			250	5A	150.0W†		2N1016E
			300	5A	150.0W†		2N1016F
			10	400	170		2N1017
			6	400	170		2N1018
			100	5A	50.0W†		2N1021
			50	7A	150.0W†		2N1021A
			120	5A	50.0W†		2N1022
			55	7A	150.0W†		2N1022A

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1023	RCA	PNP	31				12	1.5	20	60	175
2N1024	SP NAT CRY	PNP	17				6	1	9		
2N1025	SP NAT CRY	PNP	17				6	1	9	15	22
2N1026	SPKSC CRY	PNP	17				6	1	18	30	44
2N1026A	SP KSC CRY	PNP	17				6	1	36	60	88
2N1027	SP KSC CRY	PNP	17				6	1	18		
2N1028	SP CRY	PNP	13				6	1	9		
2N1029	BENCLE CBS	PNP	16				2	100		135	
2N1029A	BEN CLE CBS	PNP	16				2	100		135	
2N1029B	BEN CLE CBS	PNP	16				2	100		135	
2N1029C	BEN CLE CBS	PNP	16				2	100		135	
2N1030	BEN CLE CBS	PNP	13				3	100		200	
2N1030A	BEB CLE CBS	PNP	13				3	100		200	
2N1030B	BEN CLE CBS	PNP	13				3	100		200	
2N1030C	BEN CBS	PNP	13				3	100		200	
2N1031	BEN CBS	PNP	16				2	100		135	
2N1031A	BEN CBS	PNP	16				2	100		135	
2N1031B	BEN CBS	PNP	16				2	100		135	
2N1031C	BEN CBS	PNP	16				2	100		135	
2N1032	BEN CBS	PNP	16				3	100		200	
2N1032A	BEN CBS	PNP	16				3	100		200	
2N1032B	BEN CBS	PNP	16				3	100		200	
2N1032C	BEN CBS	PNP	16				3	100		200	
2N1034	RAY SP NAT KSC CRY	PNP	17				1	1	9	15	22
2N1035	RAY SP NAT KSC CRY	PNP	17				6	1	18	30	42
2N1036	RAY SP NAT KSC CRY	PNP	17				6	1	34	60	88
2N1037	RAY SP NAT KSC CRY	PNP	17				6	1	9	25	42
2N1038	TII KSC SYL	PNP	13	15		25mA	1	500	18		72
2N1038-1	TII SYL	PNP	73	15		25mA	1	500	18		72
2N1038-2	TII SYL	PNP	72	15		25mA	1	500	18		72
2N1039	TII KSC SYL COS	PNP	13	20		20mA	1	500	18		72
2N1039-1	TII SYL	PNP	73	20		20mA	1	500	18		72
2N1039-2	TII SYL	PNP	72	20		20mA	1	500	18		72
2N1040	TII KSC SYL COS	PNP	13	25		20mA	1	500	18		72
2N1040-1	TII	PNP	73	25		20mA	0.5	1A	20†	33†	60†
2N1040-2	TII SYL	PNP	72	25		20mA	1	500	18		72
2N1041	TII SYL COS	PNP	16	30		20mA	1	500	18		72
2N1041-1	TII SYL	PNP	72	30		20mA	1	500	18		72
2N1041-2	TII SYL	PNP	72	30		20mA	1	500	18		72
2N1042	TII CBS SYL	PNP	72	15		25mA	1.5	500	25		100
2N1042-1	TII SYL	PNP	73	15		25mA	1.5	500	25		100
2N1042-2	BEN KSC SYL	PNP	17	15		25mA	1.5	500	25		100
2N1043	TII CBS	PNP	72	20		20mA	1.5	500	25		100
2N1043-1	TII	PNP	73	20		20mA	1.5	500	25		100
2N1043-2	TII	PNP	13	20		20mA	1.5	500	25		100
2N1044	TII CBS	PNP	72	25		20mA	1.5	500	25		100
2N1044-1	TII	PNP	73	25		20mA	1.5	500	25		100
2N1044-2	SYL BEN KSC	PNP	17	25		20mA	1.5	500	25		100
2N1045	TII CBS	PNP	72	30		20mA	1.5	500	25		100
2N1045-1	TII	PNP	73	30		20mA	1.5	500	25		100

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	10	120		2N1023
			15	100	250		2N1024
			35	100	250		2N1025
			35	100	250		2N1026
			35	100	150		2N1026A
			15	100	250		2N1027
			10	100	150		2N1028
			30	15A	50.0W†		2N1029
			40	15A	50.0W†		2N1029A
			70	15A	50.0W†		2N1029B
			80	15A	50.0W†		2N1029C
			30	15A	50.0W†		2N1030
			40	15A	50.0W†		2N1030A
			70	15A	50.0W†		2N1030B
			80	15A	50.0W†		2N1030C
			30	15A	50.0W†		2N1031
			40	15A	80.0W†		2N1031A
			70	15A	50.0W†		2N1031B
			80	15A	50.0W†		2N1031C
			30	15A	50.0W†		2N1032
			40	15A	50.0W†		2N1032A
			70	15A	50.0W†		2N1032B
			80	15A	50.0W†		2N1032C
6	1	18	40	50	250		2N1034
6	1	18	35	50	250		2N1035
6	1	18	30	50	250		2N1036
6	1	11	35	50	250		2N1037
			40	3A	800		2N1038
			40	3A	800		2N1038-1
			40	3A	800		2N1038-2
			60	3A	800		2N1039
			60	3A	800		2N1039-1
			60	3A	800		2N1039-2
			80	3A	800		2N1040
			80	3A	800		2N1040-1
			80	3A	800		2N1040-2
			60	3A	800		2N1041
			60	3A	800		2N1041-1
			60	3A	800		2N1041-2
			30	3A	20.0W†		2N1042
			30	3A	20.0W†		2N1042-1
			30	3A	20.0W†		2N1042-2
			40	3A	20.0W†		2N1043
			40	3A	20.0W†		2N1043-1
			40	3A	20.0W†		2N1043-2
			50	3A	20.0W†		2N1044
			50	3A	20.0W†		2N1044-1
			50	3A	20.0W†		2N1044-2
			60	3A	20.0W†		2N1045
			60	3A	20.0W†		2N1045-1

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{CO}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1045-2	TII	PNP	13	30		20mA	1.5	500	25		100
2N1046	TII CBS	PNP	16				1	500	40†	110†	
2N1046A	TII ETC	PNP	16				1	500	40†	110†	
2N1046B	TII ETC	PNP	16				1	500	40†	110†	
2N1047	TII SEC SIL TT GE	NPN	68				10	500	12†		36†
2N1047A	TII SEC SIL GE	NPN	68				10	500	12†		36†
2N1047B	TII SIL GE	NPN	68				10	500	12†		36†
2N1048	TIL SEC SIL TT GE	NPN	68				10	500	12†		36†
2N1048A	TII SIL GE	NPN	68				10	500	12†		36†
2N1048B	SIL TII GE	NPN	68				10	500	12†		36†
2N1049	TII SEC GE	NPN	68				10	500	30†		90†
2N1049A	TII SEC SIL GE	NPN	68				10	500	30†		90†
2N1049B	SIL TII GE	NPN	68				10	500	30†		90†
2N1050	TIL SEC SIL TT GE	NPN	68				10	500	30†		90†
2N1050A	TII SEC SIL GE	NPN	68				10	500	30†		90†
2N1050B	SIL TII GE	NPN	68				10	500	30†		90†
2N1051	WE NOR	NPN	13				5	5	30	40	100
2N1052	TT	NPN	17								
2N1053	TII TT	NPN	17								
2N1054	TT SSP	NPN	17								
2N1055	TT SSP	NPN	17								
2N1056	TH GE ETC	PNP	13				5	1	16	25	48
2N1057	TH GE ETC	PNP	13				5	1		25	
2N1058	SYL ETC CBS	NPN	5				6	1	10		23
2N1059	SYL ETC CBS	NPN	5				1.5	10	50†	75†	100†
2N1060	WE NAT	NPN	17				5	5		40	
2N1065	GI	PNP	13		1mA				20†		80†
2N1066	RCA AT	PNP	9				12	1.5	20	60	175
2N1067	RCA GE SIL	PNP	13				4	200	15†	35†	75†
2N1068	RCA GE SIL	PNP	13				4	750	15†	38†	75†
2N1069	RCA SIL AMP SEC	NPN	16				4	500		25†	
2N1070	RCA GIC SIL AMP SEC	NPN	16				4	500		25†	
2N1072	WEC	NPN					5	750	20†	50†	
2N1073	BEN DEL	PNP	16				3	500		55	
2N1073A	BEN DEL	PNP	16				3	500		55	
2N1073B	BEN SYL DEL	PNP	16				3	500		55	
2N1074	RAY	NPN	13				5	5	9	15	22
2N1075	RAY	NPN	13				5	5	18	28	44
2N1076	BO RAY	NPN	13				5	1	36	60	88
2N1077	RAY	NPN	13				5	5	9	25	44
2N1078	CBS	PNP	50				1.5	500	30†	50†	
2N1084	TT	PNP	13								
2N1086	GE ETC	NPN	12				1	1	17†	40†	195†
2N1086A	GE ETC	NPN	12				1	1	17†	40†	195†
2N1087	GE	NPN	12				1	1	17†	40†	195†
2N1090	RCA CBS ETC RAY GT	NPN	13				0.2	20	30†	50†	75†
2N1091	RAY RCA CBS ETC GT	NPN	13				0.2	20	40†	70†	105†
2N1092	RCA	NPN	13		100	1A	30	200	15†	35†	75†
2N1093	TII ETC	PNP	17				5	1	65	125	195
2N1094	WE	PNP	17				6	4		50	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			60	3A	20.0W†		2N1045-2
			80	3A	15.0W†		2N1046
			30	15A	30.0W†		2N1046A
			40	10A	30.0W†		2N1046B
			80	500	1.0W		2N1047
			80	500	1.0W		2N1047A
			80	500	1.0W		2N1047B
			120	500	1.0W		2N1048
			120	500	1.0W		2N1048A
			120	500	1.0W		2N1048B
			80	500	1.0W		2N1049
			80	500	1.0W		2N1049A
			120	500	1.0W		2N1049B
			120	500	1.0W		2N1050
			120	500	1.0W		2N1050A
			120	500	1.0W		2N1050B
				100	500		2N1051
					5.0W		2N1052
					600		2N1053
			115	750	600		2N1054
			100	200	600		2N1055
5	1	20	50	300	240		2N1056
5	1	20	45	300	240		2N1057
			18	50	50		2N1058
			15	100	180		2N1059
				50	250		2N1060
5	1	40	20	100	180		2N1065
			40	10	120		2N1066
			30	500	5.0W†		2N1067
			30	1.5A	10.0W†		2N1068
			45	4A	50.0W†		2N1069
			45	4A	50.0W†		2N1070
				2A			2N1072
			40	10A	35.0W†		2N1073
			80	10A	35.0W†		2N1073A
			120	10A	35.0W†		2N1073B
6	1	18	40	50	250		2N1074
6	1	18	35	50	250		2N1075
6	1	18	30	50	500		2N1076
6	1	8	35	50	250		2N1077
			45	3A	20.0W†		2N1078
			50		600		2N1084
			9	20	65		2N1086
			9	20	65		2N1086A
			9	20	65		2N1087
			15	400	120		2N1090
			12	400	120		2N1091
			30	500	2.0W†		2N1092
				250	150		2N1093
				30	500		2N1094

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1095	BO RDR	NPN	5				10	5	9	50	
2N1096	BO	NPN	5				10	5	9	35	
2N1097	GE ETC	PNP	13				4.5	1		55	
2N1098	GE	PNP	13				4.5	1		45	
2N1099	DEL CBS TS TII SEO	PNP	25				2	5A	35†		70†
2N1100	DEL CBS MR TS MULL	PNP	25				2	5A	25†		50†
2N1101	SYL ETC CBS	NPN	5				1.5	10	25†	40†	50†
2N1102	SYL ETC	NPN	5				1.5	35	25†	40†	50†
2N1107	TI STCA	PNP	5								
2N1108	ETC STCA	PNP	5								
2N1109	TII STCA ETC	PNP	5								
2N1110	ETC	PNP	5								
2N1111	ETC	PNP	5								
2N1111A	ETC	PNP	5								
2N1111B	TII STCA ETC	PNP	5								
2N1114	SYL ETC	NPN	9								
2N1115	ETC	PNP	17								
2N1115A	GE	PNP	11								
2N1116	TT SSP SIL	PNP	17								
2N1117	TT SSP SIL	NPN	17								
2N1118	GI PCO SC SPR CRY	PNP	13				6	1	15		
2N1118A	SC PCO SPR CRY	PNP	13				6	1	15	25	35
2N1119	GI PCO SC SPR CRY	PNP	13				0.25	5	18†		
2N1120	BEN MR CLE	PNP	16				2	5A		100†	
2N1121	GE ETC	NPN	12					1	32†	72†	110†
2N1122	SC PCO SPR	PNP	10				3	1	35		
2N1122A	SC PCO SPR	PNP	10				3	1	35		
2N1123	PCO SC	PNP	13				1	100	40†	70†	
2N1124	SC PCO ETC	PNP	13				6	10	40	100	
2N1125	SC PCO ETC	PNP	13				1.5	500	50†	75†	100†
2N1126	SC PCO	PNP	13				6	1	10	40	
2N1127	SC PCO	PNP	13				1	500	50†		150†
2N1128	SC PCO ETC	PNP	13				10	2	70	100	150
2N1129	SC PCO ETC	PNP	13				6	10		190	
2N1130	SC PCO ETC UST	PNP	13				6	10		160	
2N1131	FC TT NOR TII HA	PNP	17				5	1	15		50
2N1131/51	SYL	PNP	81				5	1	15		50
2N1131A	HA SYL	PNP	13/17				5	1	15		50
2N1131A/51	SYL	PNP	81				5	1	15		50
2N1132	FC TT NOR TII HA	PNP	17				5	1	25		75
2N1132/51	SYL	PNP	81				5	1	25		100
2N1132A	HA SYL	PNP	13/17				5	1	25		100
2N1132A/51	SYL	PNP	81				5	1	25		75
2N1132B	RAY HA SYL	PNP	17				5	1	25		100
2N1132B/51	SYL	PNP	81				5	1	25		75
2N1135	PCO	PNP	17								
2N1135A	PCO	NPN	17								
2N1136	BEN CLE ETC KSC	PNP	16				4.5	500		110	
2N1136A	BEN CLE ETC KSC	PNP	16				4.5	500		110	
2N1136B	BEN CLE ETC KSC	PNP	16				4.5	500		110	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
6	1	12	45	25	150		2N1095
				30	500		2N1096
			16	100	140		2N1097
			16	100	140		2N1098
			55	15A	150.0W†		2N1099
			65	15A			2N1100
			15	100	180		2N1101
			25	100	180		2N1102
			16	5	30		2N1107
			16	5	30		2N1108
			15	5	30		2N1109
			16	5	30		2N1110
			16	5	30		2N1111
			20	5	30		2N1111A
			27	5	30		2N1111B
			25	200	150		2N1114
					150		2N1115
				125	150		2N1115A
			60	800	600		2N1116
			60	800	600		2N1117
			25	50	150		2N1118
			25	50	150		2N1118A
			10	50	150		2N1119
			70	15A	45.0W†		2N1120
			15	20	65		2N1121
			11	50	25		2N1122
			14	50	25		2N1122A
			40	400	750		2N1123
			35	250	300		2N1124
			40	250	300		2N1125
			35	150	1.0W†		2N1126
			40	150	1.0W†		2N1127
			18	150	150		2N1128
				250	150		2N1129
			25	250	150		2N1130
			30	600	600		2N1131
			35	600	300		2N1131/51
			40	600	750		2N1131A
			40	600	300		2N1131A/51
			30	600	600		2N1132
			35	600	300		2N1132/51
			40	600	600		2N1132A
			40	600	300		2N1132A/51
			45	600	600		2N1132B
			45	600	300		2N1132B/51
					100		2N1135
					100		2N1135A
			40	6A	37.0W†		2N1136
			70	6A	37.0W†		2N1136A
			80	6A	37.0W†		2N1136B

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1137	BEN CLE	PNP	16				4.5	500		160	
2N1137A	BEN CLE	PNP	16				4.5	500		160	
2N1137B	BEN CLE	PNP	16				4.5	500		160	
2N1138	BEN CLE	PNP	16				4.5	500		215	
2N1138A	BEN CLE	PNP	16				4.5	500		215	
2N1138B	BEN CLE	PNP	16				4.5	500		215	
2N1139	FC TT	NPN	13				6	10	20†	40†	
2N1140	TT	NPN	13				6	1	20		
2N1141	TIL TII	PNP	13				10	10		32	
2N1142	TII	PNP	13				10	10		33	
2N1143	TII	PNP	13				10	10		33	
2N1144	GE ETC	PNP	11				5	1	30	55	100
2N1145	GE ETC	PNP	11				5	1	20	42	100
2N1146	BC INT BEN ETC CLE	PNP	16				2	5A	60†		150†
2N1146A	BC ETC BEN INT CLE	PNP	16				2	5A	60†		150†
2N1146B	BC ETC BEN INT CLE	PNP	16				2	5A	60†		150†
2N1146C	BC BEN ETC CLE	PNP	16				2	5A	60†		150†
2N1147	BC BEN ETC CLE	PNP	16				2	5A	60†		150†
2N1147A	BC BEN ETC CLE	PNP	16				2	5A	60†		150†
2N1147B	BC BEN ETC CLE	PNP	16				2	5A	60†		150†
2N1147C	BC BEN ETC CLE	PNP	16				2	5A	60†		150†
2N1149	NAT TT TII	NPN	5				5	1	9		20
2N1150	NAT TT TII	NPN	5				5	1	19		40
2N1151	TII NAT	NPN	5				5	1	19	56	90
2N1152	NAT TT TII	NPN	5				5	1	35	63	90
2N1153	NAT TT TII	NPN	5				5	1	75		330
2N1154	TII NAT	NPN	13				10	5	9	15	1000
2N1155	TII NAT	NPN	13				10	5	9	15	1000
2N1156	TII NAT	NPN	13				10	5	9	15	1000
2N1157	MH	PNP	56				3	500		70†	
2N1157A	MH	PNP	56				2	500		70†	
2N1158	PCO	PNP	13				3	50	6		
2N1158A	PCO	PNP	13				10	3		50	
2N1159	DEL CLE	PNP	16				2	1A			150†
2N1160	DEL	PNP	16				2	1A			120†
2N1162	MR CLE	PNP	16				2	5A		65†	125†
2N1162A	MR	PNP	16				2	5A		65†	125†
2N1163	MR CLE BC	PNP	16				2	5A		65†	125†
2N1163A	MR	PNP	16								
2N1164	MR CLE	PNP	16				2	5A		65†	125†
2N1164A	MR	PNP	16				2	5A		65†	125†
2N1165	MR CLE BC	PNP	16				2	5A		65†	125†
2N1165A	MR	PNP	16				2	5A		65†	125†
2N1166	MR CLE	PNP	16				1	5A		65†	125†
2N1166A	MR	PNP	16				2	5A		65†	125†
2N1167	MR CLE BC	PNP	16				2	5A		65†	125†
2N1167A	MR	PNP	16				2	5A		65	125†
2N1168	DEL	PNP	16				12	600		90	
2N1169	SYL RCA AT	NPN	13				0.3	200	20†		40†
2N1170	SYL RCA AT	NPN	13				0.3	200	20†		40†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	6A	25.0W†		2N1137
			70	6A	25.0W†		2N1137A
			80	6A	60.0W†		2N1137B
			40	5A	60.0W†		2N1138
			70	6A	60.0W†		2N1138A
			80	6A	60.0W†		2N1138B
			15		500		2N1139
			40		1.0W†		2N1140
			35	100	750		2N1141
			40	100	750		2N1142
			60	100	750		2N1143
			16	100	140		2N1144
			16	100	140		2N1145
			40	15A	50.0W†		2N1146
			60	15A	50.0W†		2N1146A
			80	15A	50.0W†		2N1146B
			100	15A	50.0W†		2N1146C
			40	15A	70.0W†		2N1147
			60	15A	70.0W†		2N1147A
			80	15A	70.0W†		2N1147B
			40	15A	70.0W†		2N1147C
				25	150		2N1149
				25	150		2N1150
				25	150		2N1151
				25	150		2N1152
				25	150		2N1153
				60	750		2N1154
				50	750		2N1155
				40	750		2N1156
					187.0W†		2N1157
					187.0W†		2N1157A
					60		2N1158
				100	75		2N1158A
				5A			2N1159
				7A			2N1160
			35	25A	50.0W†		2N1162
			35	25A	90.0W†		2N1162A
			35	25A	50.0W†		2N1163
			35	25A	90.0W†		2N1163A
			60	25A	50.0W†		2N1164
			60	25A	90.0W†		2N1164A
			60	25A	60.0W†		2N1165
			60	25A	90.0W†		2N1165A
			75	25A	50.0W†		2N1166
			75	25A	90.0W†		2N1166A
			75	25A	50.0W†		2N1167
			75	25A	90.0W†		2N1167A
				5A	45.0W†		2N1168
			18	400	120		2N1169
			20	400	120		2N1170

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{co}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2N1171	RAY ETC	PNP	13				0.25		30†		90†
2N1172	DEL	PNP	57				10	100		43	
2N1173	WE	PNP	17				10	0.5		70	
2N1174	WE	PNP	17				10	0.5		90	
2N1175	GE	PNP	13				5	1	60	80	120
2N1175A	GE	PNP	13				5	1	60	80	120
2N1176	BEN	PNP	13				5	10	20	65	
2N1176A	BEN	PNP	13				5	10	20	65	
2N1176B	BEN	PNP	13				5	10	20	65	
2N1177	RCA	PNP	3				12	1		100	
2N1178	RCA	PNP	3				12	1		40	
2N1179	RCA	PNP	3				12	1		80	
2N1180	RCA	PNP	3				12	1		80	
2N1183	RCA AT	PNP	13				2	400	20†		60†
2N1183A	RCA AT	PNP	13				2	400	20†		60†
2N1183B	RCA AT	PNP	13				2	400	20†		60†
2N1184	RCA AT	PNP	13				2	400	40†		120†
2N1184A	RCA AT	PNP	13				2	400	40†		120†
2N1184B	RCA AT	PNP	13				2	400	40†		120†
2N1185	MR	PNP	13				6	1		295	
2N1186	MR	PNP	13				6	1		50	
2N1187	MR	PNP	13				6	1		85	
2N1188	MR	PNP	13				6	1		155	
2N1189	MR	NPN	17				1	10	60†		
2N1190	SC PCO	NPN	13				1	20	12†	25†	60†
2N1191	MR ETC	PNP	13				6	1	30	40	70
2N1192	MR SYL ETC	PNP	13				6	1	50	75	125
2N1193	MR SYL ETC	PNP	13				6	1	100	150	250
2N1194	MR	PNP	13				6	1		345	
2N1195	TII WE	PNP	13				10	10		50	
2N1196	HA	PNP	13				10.5	2	5	10	
2N1197	HA	PNP	13				10.5	2	8	10	
2N1198	GE ETC	NPN	12				5	1	20	65	200
2N1199	PCO	NPN	13				1	20	12†	25†	60†
2N1199A	PCO	PNP	13				1	20	12†	25†	60†
2N1200	PCO	NPN	138				10	2	9		
2N1201	PCO	NPN	138				10	2	9		
2N1202	MH KSC	PNP	27				2	500	40†	86†	120†
2N1203	MH KSC	PNP	27				2	500	50†		80†
2N1204	PCO SC SPR MR	PNP	17				0.5	200	25		
2N1204A	MR	PNP	17				0.5	200	25†		
2N1205	TT	NPN	13				10	1	10		
2N1206	TT	NPN	13				10	5	25		90
2N1207	TT	NPN	13				10	5	25		90
2N1208	TT TH SIL	NPN	35				20	1A		33†	
2N1209	TT TH SIL	NPN	35				20	1A		33	
2N1210	TT SIL	NPN	75				12	1A	15†	25†	75†
2N1211	TT SIL	NPN	75				12	1A	15†	25†	75†
2N1212	TT TH	NPN	35				15	1A	12†	30†	60†
2N1213	RCA AT	PNP	13								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			12	400	150		2N1171
				1.5A			2N1172
		10*		200	250		2N1173
				200	250		2N1174
5	1	6	25	200	200		2N1175
5	1	6*	25	200	200		2N1175A
				300	300		2N1176
				300	300		2N1176A
			40	300	300		2N1176B
			60	300	300		2N1177
				10	80		
				10	80		2N1178
				10	80		2N1179
				10	80		2N1180
			20	3A	1.0W		2N1183
			30	3A	1.0W		2N1183A
			40	3A	1.0W		2N1183B
			20	3A	1.0W		2N1184
			30	3A	1.0W		2N1184A
			40	3A	1.0W		2N1184B
				500	200		2N1185
				500	200		2N1186
				500	200		2N1187
				500	200		2N1188
				500	200		2N1189
			15	100	100		2N1190
4.5	0.5	10	25	200	175		2N1191
4.5	0.5	10	25	200	175		2N1192
4.5	0.5	10	25	200	175		2N1193
					200		2N1194
			30	40	225		2N1195
			40		250		2N1196
			40		250		2N1197
			25	75	75		2N1198
			15	100	150		2N1199
				100	150		2N1199A
					100		2N1200
					100		2N1201
							2N1202
			60	3.5A			2N1203
			70	3.5A			2N1204
			15	500	300		
			15	500	300		2N1204A
10	2	12	20		150		2N1205
			60		1.2W†		2N1206
			125		1.2W†		2N1207
			60	5A	85.0W†		2N1208
			45	5A	85.0W†		2N1209
			60	5A	60.0W†		2N1210
			80	5A	60.0W†		2N1211
			60		45.0W†		2N1212
			25	100	75		2N1213

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1214	RCA AT	PNP	13								
2N1215	RCA AT	PNP	13								
2N1216	RCA AT	PNP	13								
2N1217	GE	NPN	12				1	2	40†	60†	100†
2N1218	SYL	NPN	16				1.5	100	40†		160†
2N1219	GT GI SP CRY	PNP	17				0.25	5	18†		
2N1220	GI SP NAT	PNP	17				0.25	5	9†		
2N1221	GI SP NAT CRY	PNP	17				6	1	18		
2N1222	GI SP NAT CRY	PNP	17				6	1	9		
2N1223	GT SP NAT CRY	PNP	17				6	1	6	10	
2N1224	RCA SYL	PNP	9				10.5	1.5	20	60	175
2N1225	RCA SYL CSF	PNP	9				10.5	1.5	20	60	175
2N1226	RCA SYL AT	PNP	9				12	1	20	60	175
2N1227	BEN	PNP	16				14	500		50†	
2N1227-3	BEN	PNP	16								
2N1227A-1	BEN	PNP	16								
2N1227A-2	BEN	PNP	16								
2N1228	HA NAT WTC SP CRY	PNP	17				5	1	14		42
2N1229	HA NAT WTC SP CRY	PNP	17				5	1	28		65
2N1230	HA NAT WTC SP CRY	PNP	17				5	1	14		32
2N1231	HA NAT WTC SP CRY	PNP	17				5	1	28		65
2N1232	HA NAT WTC SP CRY	PNP	17				5	1	14		32
2N1233	HA NAT WTC SP CRY	PNP	17				5	1	28		65
2N1234	HA NAT WTC SP CRY	PNP	17				5	1	14		32
2N1238	HA	PNP	55				5	1	14		32
2N1239	HA	PNP	55				5	1	28		65
2N1240	HA	PNP	55				5	1	14		32
2N1241	HA	PNP	55				5	1	28		65
2N1242	HA	PNP	55				5	1	14		32
2N1243	HA	PNP	55				5	1	28		65
2N1244	HA	PNP	55				5	1	14		32
2N1245	CBS	PNP	16				2	500	50†		
2N1246	CBS	PNP	16				2	500	150†		
2N1247	TT NAT	NPN	17				3	0.1		70†	
2N1248	TT NAT GE	NPN	13				3	0.3		70†	
2N1249	TT	NPN					3	20 μ A		38	
2N1250	TT SIL	NPN	35				15	1A	12†		36†
2N1251	SYL ETC UST	NPN	5				6	1	70	150	250
2N1252	TT IND RHE TII FC	NPN	13								
2N1252A	RHE	NPN	13								
2N1253	TT IND RHE TII FC	NPN	13								
2N1253A	RHE	NPN	13								
2N1254	HA	PNP	17				10	1	25†		50†
2N1255	HA	PNP	17				10	1	40†		80†
2N1256	HA	PNP	17				10	1	25†		50†
2N1257	HA	PNP	17				10	1	40†		80†
2N1258	HA	PNP	17				10	1	75†		150†
2N1259	HA	PNP	17				10	1	25†		100†
2N1261	MH KSC	PNP	27				2	500		50†	
2N1262	MH KSC	PNP	27				2	500		80†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			25	100	75		2N1214
			25	100	75		2N1215
			25	100	75		2N1216
			20	25	75		2N1217
			45	2A	6.0W		2N1218
			25	100	250		2N1219
			25	100	250		2N1220
6	1	16	25	100	250		2N1221
6	1	16	25	100	250		2N1222
			25	100	250		2N1223
			40	10	120		2N1224
			40	10	120		2N1225
			60	10	120		2N1226
			30	3A			2N1227
			40	3A	40.0W†		2N1227-3
			40	3A	40.0W†		2N1227A-1
			40	3A	40.0W†		2N1227A-2
5	1	10	15	100	400		2N1228
5	1	10	15	100	400		2N1229
5	1	10	35	100	400		2N1230
5	1	10	35	100	400		2N1231
5	1	10	60	100	400		2N1232
5	1	10	60	100	400		2N1233
5	1	10	110	100	400		2N1234
5	1	10	15		1.0W		2N1238
5	1	10	15		1.0W		2N1239
5	1	10	35		1.0W		2N1240
5	1	10	35		1.0W		2N1241
5	1	10	60		1.0W		2N1242
5	1	10	60		1.0W		2N1243
5	1	10	110		1.0W		2N1244
			25	4A	20.0W†		2N1245
			25	4A	20.0W†		2N1246
3	50μA	6	6	5	30		2N1247
			6	5	30		2N1248
				5	30		2N1249
			60	5A	85.0W†		2N1250
			15	100	150		2N1251
			20	500	600		2N1252
					800		2N1252A
			20	500	600		2N1253
					800		2N1253A
12	2	10	15		275		2N1254
10	2	10	15		275		2N1255
10	2	10	30		275		2N1256
10	2	10	30		275		2N1257
10	2	10	50		275		2N1258
10	2	10	50		275		2N1259
			45	3.5A			2N1261
			45	3.5A			2N1262

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
2N1263	MH KSC	PNP	27				2	500		115†	
2N1264	SYL	PNP	3				9	1.5	15		
2N1264/13	SYL	PNP	27				9	1		25	
2N1265	SYL ETC	PNP	5				6	1	25	75	
2N1265/5	SYL	PNP	13				6	1		75	
2N1266	SYL	PNP	5				6	1	22	48	
2N1267	PCO SC	NPN	13				10	2	6	11	18
2N1268	PCO	NPN	13				10	2	11	20	36
2N1269	PCO	NPN	13				10	2	28	50	90
2N1270	PCO	NPN	13				10	2	6	11	18
2N1271	PCO	NPN	13				10	2	11	20	36
2N1272	PCO	NPN	13				10	2	28	50	90
2N1273	TII ETC	PNP	17				1	50	30†	50†	150†
2N1274	TII ETC	PNP	17				1	50	30†	50†	150†
2N1275	RAY SP NAT CRY	PNP	13				6	1		14	
2N1276	GE	NPN	13				5	1	9	14	22
2N1277	GE	NPN	13				5	1	18	33	44
2N1278	GE	NPN	13				5	1	37	66	90
2N1279	GE	NPN	13				5	1	76	101	333
2N1280	IND ETC	PNP	13				1	20	40†	60†	120†
2N1281	IND ETC	PNP	13				1	20	60†	90†	180†
2N1282	IND ETC	PNP	13				1	20	70†	100†	210†
2N1284	IND ETC	PNP	13				1	10	30†	90†	150†
2N1285	SYL	PNP	9				12	1.5			100
2N1287	BEN	PNP	13				5	10		40	
2N1287A	BEN	PNP	13				5	10		60	
2N1288	GE	NPN	13				1	10	50†	150†	300†
2N1289	GE	NPN	17				1	10		70†	
2N1291	CBS	PNP	16				2	500	30†		
2N1292	CBS SYL	NPN	16				2	500	30†		
2N1293	CBS	PNP	16				2	500	30†		
2N1294	CBS SYL	NPN	16				2	500	30†		
2N1295	CBS	PNP	16				2	500	30†		
2N1296	CBS SYL	NPN	16				2	500	30†		
2N1297	CBS	PNP	16				2	500	30†		
2N1298	CBS	NPN	16				2	500	30†		
2N1299	SYL ETC	NPN	13				1	50	35†		
2N1300	RCA AT GT TII	PNP	17				3	10	40	120	
2N1301	RCA AT TII	PNP	17				3	10	40	120	
2N1302	TII SYL ETC RAY TAD	NPN	17				5	1		105	
2N1303	TII SYL ETC RAY TAD	PNP	17				5	1		115	
2N1304	TII SYL GE RAY TAD	NPN	17				5	1		120	
2N1305	TII SYL ETC RAY TAD	PNP	17				5	1		130	
2N1306	TII SYL ETC RAY TAD	NPN	17				5	1		135	
2N1307	GE TII SYL ETC TAD	PNP	17				5	1		150	
2N1308	GE TII SYL ETC TAD	NPN	17				5	1		170	
2N1309	TII SYL ETC TAD	PNP	17				5	1		190	
2N1310	GI ETC TAD TII	NPN	17				5	1		65	
2N1311	GI ETC TAD TII	NPN	17				5	1		60	
2N1312	GI ETC TAD TII	NPN	17				5	1		70	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
			45	3.5A			2N1263
				10	50		2N1264
				10	50		2N1264/13
			10	100	50		2N1265
				100	50		2N1265/5
			10		80		2N1266
			15	100	100		2N1267
			15	100	100		2N1268
			15	100	100		2N1269
			15	100	100		2N1270
			15	100	100		2N1271
			15	100	100		2N1272
5	1	6	15	150	150		2N1273
5	1	6	25	150	150		2N1274
6	1	18	80	50	250		2N1275
5	1	22	30	25	150		2N1276
5	1	18	30	25	150		2N1277
5	1	15	30	25	150		2N1278
5	1	15	30	25	150		2N1279
			16	400	200		2N1280
			12	400	200		2N1281
			6	400	200		2N1282
			15	400	150		2N1284
				10	120		2N1285
				300	165		2N1287
				300	165		2N1287A
			10	50	75		2N1288
			15	50	75		2N1289
			30	3A	7.0W		2N1291
			30	3A	20.0W†		2N1292
			45	3A	20.0W†		2N1293
			45	3A	20.0W†		2N1294
			60	3A	20.0W†		2N1295
			60	3A	20.0W†		2N1296
			80	3A	20.0W†		2N1297
			80	3A	20.0W†		2N1298
			20	200	150		2N1299
			12	100	150		2N1300
5	1	4	12	100	150		2N1301
5	1	4	25	300	150		2N1302
5	1	4	25	300	150		2N1303
5	1	4	20	300	150		2N1304
5	1	4	20	300	150		2N1305
5	1	3	15	300	150		2N1306
5	1	3	15	300	150		2N1307
5	1	3	15	300	150		2N1308
5	1	3	15	300	150		2N1309
5	1	10			120		2N1310
6	1	10	75		120		2N1311
6	1	10	50		120		2N1312

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{CO}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
2N1313	TS IND ETC	PNP	13				0.25	1	83		
2N1314	AMP PCO RO	PNP	16				14	30	20†		80†
2N1315	AMP	PNP	16				6	3.5A			64†
2N1316	IND ETC	PNP	13				0.25	1	50†	100†	200†
2N1317	IND ETC	PNP	13				0.25	1	45†	90†	180†
2N1318	IND ETC	PNP	13				0.25	1	40†	85†	150†
2N1319	RCA AT	PNP	13				0.3	400	30†	30†	
2N1320	CBS	PNP	50				3	500	30†	50†	
2N1321	CBS SYL	NPN	50				3	500	30†	50†	
2N1322	CBS	PNP	50				3	500	30†	50†	
2N1323	CBS SYL	NPN	50				3	500	30†	50†	
2N1324	CBS	PNP	50				3	500	30†	50†	
2N1325	CBS	NPN	50				3	500	30†	50†	
2N1326	CBS	PNP	50				3	500	30†	50†	
2N1327	CBS	NPN	50				3	500	30†	50†	
2N1328	CBS	PNP	50				3	500	30†	50†	
2N1329	CBS	NPN	50				3	500	30†	50†	
2N1330	CBS	NPN	50				3	500	30†	50†	
2N1331	CBS	PNP	50				3	500	30†	50†	
2N1332	CBS	NPN	50				3	500	30†	50†	
2N1333	CBS	PNP	50				3	500	30†	50†	
2N1334	CBS	NPN	50				3	500	30†	50†	
2N1335	PSI	NPN	13				50	30		13	
2N1336	PSI	NPN	13				50	30		13	
2N1337	PSI	NPN	13				50	30		13	
2N1338	PSI	NPN	13								
2N1339	PSI	NPN	13								
2N1340	PSI	NPN	13								
2N1341	PSI	NPN	13								
2N1342	PSI	NPN	13				50	30		13	
2N1343	IND ETC	PNP	13				0.35	50	15†		45†
2N1344	IND ETC	PNP	13				1	20	60†	90†	200†
2N1345	IND ETC	PNP	13				0.3	400	30†	60†	100†
2N1346	IND ETC	PNP	13				0.25	0.3	40†	125†	250†
2N1347	IND ETC	PNP	13				1	10	30†	80†	100†
2N1348	IND ETC	PNP					0.3	10	45†	95†	150†
2N1349	IND ETC	PNP					0.3	10	50†	110†	150†
2N1350	IND ETC	PNP					0.3	10	45†	95†	150†
2N1351	IND ETC	PNP					0.3	10	35†	65†	110†
2N1352	IND ETC	PNP	13				6	1	40†	70†	100†
2N1353	UST IND ETC	PNP	13				1	10	25†	70†	150†
2N1354	IND ETC	PNP	13				1	10	25†	70†	150†
2N1355	IND UST ETC	PNP	13				1	10	30†	80†	150†
2N1356	IND ETC	PNP	13				1	10	30†	80†	150†
2N1357	IND UST ETC	PNP	13				1	10	40†	85†	150†
2N1358	DEL TII MR TS CSF	PNP	25				2	1.2A	40†	65†	80†
2N1358A	DEL	PNP	25				2	1.2A			80†
2N1359	MR	PNP	16				4	1A	35†	55†	90†
2N1360	MR	PNP	16				4	1A	60†	90†	140†
2N1362	MR	PNP	16				4	1A	35†	55†	90†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
6	0.5	7	15	400	175		2N1313
			16	3.5A	13.0W†		2N1314
			16	3.5A	12.5W†		2N1315
			15	400	200		2N1316
			12	400	200		2N1317
			6	400	200		2N1318
				400	120		2N1319
			30	3A	20.0W†		2N1320
			30	3A	20.0W†		2N1321
			45	3A	20.0W†		2N1322
			45	3A	20.0W†		2N1323
			60	3A	20.0W†		2N1324
			60	3A	20.0W†		2N1325
			80	3A	20.0W†		2N1326
			80	3A	20.0W†		2N1327
			45	3A	20.0W†		2N1328
			30	3A	20.0W†		2N1329
			60	3A	20.0W†		2N1330
			60	3A	20.0W†		2N1331
			60	3A	20.0W†		2N1332
			80	3A	20.0W†		2N1333
			80	3A	20.0W†		2N1334
			90	75	850		2N1335
			90	75	850		2N1336
			90	75	850		2N1337
					800		2N1338
			100	75	850		2N1339
			100	75	850		2N1340
			100	75	850		2N1341
			125		800		2N1342
			16	400	150		2N1343
			10	400	150		2N1344
			8	400	150		2N1345
			10	400	150		2N1346
			12	200	150		2N1347
			12	400	200		2N1348
			15	400	200		2N1349
			20	400	200		2N1350
			18	400	200		2N1351
			20	200	150		2N1352
			10	200	200		2N1353
			15	200	200		2N1354
			20	200	200		2N1355
			20	200	150		2N1356
			15	200	200		2N1357
				15A	90.0W†		2N1358
			60	15A	90.0W†		2N1358A
			40	3A	90.0W†		2N1359
			40	3A	90.0W†		2N1360
			75	3A	90.0W†		2N1362

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1363	MR	PNP	16				4	1A	60†	90†	140†
2N1364	MR	PNP	16				4	1A	35†	55†	90†
2N1365	MR	PNP	16				4	1A	60†	90†	140†
2N1366	RAY ETC	NPN	13				6	1		10	
2N1367	RAY ETC	NPN	13				1	10	20†		
2N1370	TII	PNP	17				1	50	50†	80†	150†
2N1371	TII ETC	PNP	17				1	50	50†	80†	150†
2N1372	TII ETC SYL	PNP	13				5	1		45	
2N1373	TII ETC SYL	PNP	13				5	1		45	
2N1374	TII ETC SYL	PNP	13				5	1		70	
2N1375	TII ETC SYL	PNP	13				5	1		70	
2N1376	TII ETC SYL	PNP	13				5	1		95	
2N1377	TII ETC SYL	PNP	13				5	1		95	
2N1378	TII ETC SYL	PNP	13				1	50	95†	150†	300†
2N1379	TII	PNP	13				1	50	95†	150†	300†
2N1380	TII SYL ETC	PNP	13				1.5	50	30	100	300
2N1381	TII ETC SYL	PNP	17				1	50	30†	100†	300†
2N1382	TII ETC	PNP	13				1.5	50	50	80	150
2N1382(B)	TII	PNP	13				1	50	30†		38†
2N1382(BL)	TII	PNP	13				1	50	95†		120†
2N1382(G)	TII	PNP	13				1	50	75†		95†
2N1382(O)	TII	PNP	13				1	50	50†		60†
2N1382(R)	TII	PNP	13				1	50	38†		50†
2N1382(V)	TII	PNP	13				1	50	120†		150†
2N1382(Y)	TII	PNP	13				1	50	60†		75†
2N1383	TII ETC	PNP	13				1.5	50		50	
2N1383(B)	TII	PNP	13				1	50	30†		38†
2N1383(BL)	TII	PNP	13				1	50	95†		120†
2N1383(G)	TII	PNP	13				1	50	75†		95†
2N1383(O)	TII	PNP	13				1	50	50†		60†
2N1383(R)	TII	PNP	13				1	50	38†		50†
2N1383(V)	TII	PNP	13				1	50	120†		150†
2N1383(Y)	TII	PNP	13				1	50	60†		75†
2N1384	RCA IND	PNP	13				0.5	200		50†	
2N1385	TII	PNP	13				10	10	10†		
2N1386	RAY	NPN	13				5	10	30†	45†	90†
2N1387	RAY	NPN	13				5	10	20†	30†	40†
2N1388	RAY	NPN	13								
2N1389	RAY	NPN	13								
2N1390	RAY	NPN	13								
2N1392	GI	PNP	13				5	1			40
2N1393	GI	PNP	13				5	1			160
2N1394	GI	PNP	13				5	1			50
2N1395	RCA AT	PNP	9				12	1.5	50	90	175
2N1396	RCA AT SYL	PNP	9				12	1.5	50	90	175
2N1397	RCA AT	PNP	9				12	1.5	50	90	175
2N1398	TII	PNP	9								
2N1399	TII	PNP	9								
2N1400	TII	PNP	9								
2N1401	TII	PNP	9								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5 5	1 1	6 6	75	3A	90.0W†		2N1363
			100	3A	90.0W†		2N1364
			100	3A	90.0W†		2N1365
			12	10	150		2N1366
			12	10	150		2N1367
			25	150	150		2N1370
			45	150	150		2N1371
			25	200	250		2N1372
			45	200	250		2N1373
			25	200	250		2N1374
			45	200	250		2N1375
			25	200	250		2N1376
			45	200	250		2N1377
			12	200	250		2N1378
			25	200	250		2N1379
			12	200	250		2N1380
			25	200	250		2N1381
			25	200	250		2N1382
			25	200	200		2N1382(B)
			25	200	200		2N1382(BL)
			25	200	200		2N1382(G)
			25	200	200		2N1382(O)
			25	200	200		2N1382(R)
			25	200	200		2N1382(V)
			25	200	200		2N1382(Y)
			25	200	200		2N1383
			25	200	200		2N1383(B)
			25	200	200		2N1383(BL)
			25	200	200		2N1383(G)
			25	200	200		2N1383(O)
			25	200	200		2N1383(R)
			25	200	200		2N1383(V)
			25	200	200		2N1383(Y)
				500	240		2N1384
				100	300		2N1385
			25	50	300		2N1386
			30	50	300		2N1387
			45	50	300		2N1388
			50	50	300		2N1389
			20	50	300		2N1390
16*					50		2N1392
					50		2N1393
					50		2N1394
			40	10	120		2N1395
			40	10	120		2N1396
			40	10	120		2N1397
			30	10	35		2N1398
			30	10	35		2N1399
			30	5	35		2N1400
			30	5	35		2N1401

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1401A	TII	PNP	9								
2N1402	TII	PNP	9								
2N1403	TII	PNP	13								
2N1404	TII	PNP	13				0.2	24		100†	
2N1405	TII	PNP	9				6	2	10		
2N1406	TII	PNP	9				6	2	10		
2N1407	TII	PNP	9				6	2	10		
2N1408	GI ETC TAD	PNP	13				5	1	10	25	30
2N1409	PSI	NPN	13				10	150	15†		45†
2N1409A	PSI	NPN	13				10	150		35	
2N1410	PSI	NPN	13				10	150	30†		90†
2N1410A	PSI	NPN	13				10	150		65	
2N1411	CBS PCO TII	PNP	10				1	50		75†	
2N1412	DEL TS SEO	PNP	25				2	5A	25†		50†
2N1413	GE ETC TII	PNP	13				5	1	20	30	41
2N1414	GE ETC TII	PNP	13				5	1	30	44	64
2N1415	GE ETC TII	PNP	13				5	1	44	64	80
2N1416	PCO ETC	PNP	10				4.5	2	70	110	150
2N1417	TT GE	NPN	13				6	1	30	60	200
2N1418	TT GE	NPN	13				6	1	30	60	200
2N1419	CLE	PNP	16								
2N1420	IND RHE NOR ME TT	NPN	17								
2N1420A	FC	NPN	17								
2N1425	RCA	PNP	3				12	1		50	
2N1426	RCA	PNP	2				12	1		130	
2N1427	PCO SPR TII	PNP	10				3	0.5		120	
2N1428	PCO	PNP	13				3	1	25	45	
2N1429	PCO SPR CRY	PNP	13				3	1	25	45	
2N1430	BEN	PNP	16								
2N1431	SYL ETC	NPN	5				1.5	10	75		
2N1432	SYL	PNP	9				16	2	30		
2N1433	CBS	PNP	27				2	2A	20†		50†
2N1434	CBS	PNP	27				2	2A	45†		115†
2N1435	CBS	PNP	27				2	2A	30†		75†
2N1436	PCO	PNP					0.5	10	20†		
2N1437	CBS	PNP	27				3	500	20†	40†	
2N1438	KSC	PNP	27				2	500	20†		
2N1439	NAT CRY	PNP	13				6	1		9	
2N1440	NAT CRY	PNP	13				6	1	9	18	22
2N1441	NAT CRY	PNP	13				6	1	18		36
2N1442	NAT CRY	PNP	13				6	1	30	45	65
2N1443	NAT CRY	PNP	13				6	1		65	
2N1444	WE	NPN	13				0.5	250		25†	
2N1446	IND ETC	PNP	13				6	1	16	30	
2N1447	IND ETC	PNP	13				6	1	30	45	
2N1448	IND ETC	PNP	13				6	1	45	65	
2N1449	IND ETC	PNP	13				6	1	60	80	
2N1450	GI SYL TAD	PNP	13				1	10	20†		
2N1451	IND ETC	PNP	13				2	20	20†	45†	65†
2N1452	IND ETC	PNP	13				2	20	30†	60†	90†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
6	1	16	30	5	35		2N1401A
			30	5	35		2N1402
					250		2N1403
			25	300	150		2N1404
			30	50	75		2N1405
			30	50	75		2N1406
			30	50	75		2N1407
			25	200	150		2N1408
			25	500	840		2N1409
				500	800		2N1409A
5	1	6	30	500	840		2N1410
				500	800		2N1410A
					25		2N1411
			65	15A	87.0W†		2N1412
5	1	6	20	200	200		2N1413
5	1	6	20	200	200		2N1414
5	1	6	20	200	200		2N1415
			18	150	250		2N1416
		19	15		150		2N1417
		19	30		150		2N1418
					87.0W†		2N1419
			30	500	600		2N1420
					800		2N1420A
				10	80		2N1425
				10	80		2N1426
				50	25		2N1427
			6	50	100		2N1428
			6	50	100		2N1429
			60	10A	60.0W†		2N1430
			15	100	180		2N1431
				10	80		2N1432
			50	3.5A	12.0W†		2N1433
			50	3.5A	12.0W†		2N1434
			50	3.5A	12.0W†		2N1435
			15	50	50		2N1436
				3A	20.0W†		2N1437
				3A	20.0W†		2N1438
				100	400		2N1439
			40	50	400		2N1440
			35	100	400		2N1441
6	1	10*	30	100	400		2N1442
				100	400		2N1443
				250	500		2N1444
			25	400	200		2N1446
			25	400	200		2N1447
			25	400	200		2N1448
			25	400	200		2N1449
				100	120		2N1450
			4.5	0.5	200		2N1451
			4.5	0.5	200		2N1452

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{CO}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2N1453	CBS	PNP	27				2	1A	40†		90†
2N1454	CBS	PNP	27				2	1A	70†		150†
2N1455	CBS	PNP	27				2	1A	40†		90†
2N1456	CBS	PNP	27				2	1A	70†		150†
2N1457	CBS	PNP	27				2	1A	40†		90†
2N1458	CBS	PNP	27				2	1A	70†		150†
2N1461	CBS	PNP	27				2	1A	40†		90†
2N1462	CBS	PNP	27				2	1A	70†		150†
2N1463	CBS	PNP	27				1	1A	40†		90†
2N1464	CBS	PNP	27				1	1A	70†		150†
2N1465	CBS	PNP	27				1	500	20†		
2N1466	CBS	PNP	27				2	500	20†		
2N1468	RAY	NPN	13								
2N1469	SP CRY	PNP	13				6	1	36	60	88
2N1470	RAY	NPN	16				5	1A	15†		
2N1471	IND ETC	PNP	13				6	1	100†	160†	250†
2N1472	PCO	NPN	13				5	10	20†	35†	
2N1473	STL ETC	NPN	13				1	30	80†		
2N1474	SP CRY	PNP	17				6	1	12	26	44
2N1474A	SP CRY	PNP	17				6	1	18	30	44
2N1475	SP CRY	PNP	17				6	1	36	60	88
2N1476	SP CRY KSC	PNP	17				6	1	12	24	36
2N1477	SP CRY KSC	PNP	17				6	1	30	45	66
2N1478	PCO SP ETC TAD	PNP	13				1	100	40†	70†	110†
2N1479	RCA AT SIL	NPN	13				4	200	25†		75†
2N1480	RCA AT SIL	NPN	13				4	200	25†		75†
2N1481	RCA AT SIL	NPN	13				4	200	35†		100†
2N1482	RCA AT SIL	NPN	13				4	200	35†		100†
2N1483	RCA AT SIL	NPN	13				4	750	15†		75†
2N1484	RCA AT SIL	NPN	13				4	750	15†		75†
2N1485	RCA AT SIL	NPN	13				4	750	35†		100†
2N1486	RCA AT SIL	NPN	13				4	750	35†		100†
2N1487	RCA AT SIL AMP SEC	NPN	16				4	500		60†	
2N1488	RCA AT SIL AMP SEC	NPN	16				4	1.5A	10†		50†
2N1489	RCA AT SIL AMP SEC	NPN	16				4	1.5A	25†		50†
2N1490	RCA AT SIL AMP SEC	NPN	16				4	500		60†	
2N1491	RCA AT	NPN	9				20	15	15	50	200
2N1492	RCA AT	NPN	9				20	15	15	50	200
2N1493	RCA AT	NPN	9				20	15	15	50	200
2N1494	PCO SPR	PNP	13				1.5	400		35†	
2N1494A	PCO	PNP	13				0.5	200	25†	45†	
2N1495	PCO	PNP	13				1	200		60†	
2N1496	PCO	PNP	13				1	200		60†	
2N1499	PCO SC	PNP	13				0.5	40	20†		
2N1499A	PCO SPR	PNP	13				0.25	10		35†	
2N1500	PCO SC SPR	PNP	13				0.5	50	20†	50†	
2N1501	MH KSC	PNP	27				2	500		80†	
2N1502	MH KSC	PNP	27				2	500		80†	
2N1504	CBS RAY	PNP	21				2	500	21†		
2N1504/10	KSC	PNP	27				2	500	21†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			25	5A	40.0W†		2N1453
			25	5A	40.0W†		2N1454
			50	5A	40.0W†		2N1455
			50	5A	40.0W†		2N1456
			65	5A	40.0W†		2N1457
			65	5A	40.0W†		2N1458
			25	5A	40.0W†		2N1461
			25	5A	40.0W†		2N1462
			50	5A	40.0W†		2N1463
			50	5A	40.0W†		2N1464
			70	3A	40.0W†		2N1465
			70	3A	40.0W†		2N1466
					250		2N1468
			35	100	250		2N1469
			60		55.0W†		2N1470
			12	200	200		2N1471
			25	100	100		2N1472
			20	400	167		2N1473
			60	100	250		2N1474
			60	100	250		2N1474A
			60	100	250		2N1475
			100	100	250		2N1476
			100	100	250		2N1477
			20	400	250		2N1478
			40	1.5A	4.0W†		2N1479
			55	1.5A	4.0W†		2N1480
			40	1.5A	4.0W†		2N1481
			55	1.5A	4.0W†		2N1482
			40	3A	15.0W†		2N1483
			55	3A	15.0W†		2N1484
			40	3A	15.0W†		2N1485
			55	3A	15.0W†		2N1486
			40	6A	60.0W†		2N1487
			55	6A	60.0W†		2N1488
			40	6A	60.0W†		2N1489
			50	6A	60.0W†		2N1490
			30	50	500		2N1491
			60	50	500		2N1492
			100	50	500		2N1493
			20	500	400		2N1494
				500	400		2N1494A
				500	250		2N1495
				500	500		2N1496
			15	50	25		2N1499
				50	60		2N1499A
			12	50	50		2N1500
			40	3.5A	10.0W†		2N1501
			40	3.5A	10.0W†		2N1502
			60	3A			2N1504
			60	3A			2N1504/10

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
2N1505	PSI CSF NAT	NPN	13				28	100	7†		
2N1506	PSI CSF NAT	NPN	13				28	100	15†		50†
2N1506A	TH CSF	NPN	17				28	100	10†	50†	100†
2N1507	RHE NAT TII CDC	NPN	13								
2N1508	TII	NPN					3.6	600	20†		
2N1509	TII	NPN					3.6	600	20†		
2N1510	GE	NPN	12				1	1	8†	30†	90†
2N1511	RCA AT SIL	NPN	25				4	500		62†	
2N1512	RCA AT SIL	NPN	25				4	500		62†	
2N1513	RCA AT SIL	NPN	25				4	500		62†	
2N1514	RCA AT SIL	NPN	25				4	500		62†	
2N1515	AMP RO	PNP	3				6	1		100	
2N1516	AMP RO	PNP	3				6	1		67†	
2N1517	AMP RO	PNP	3				6	1		67†	
2N1517A	AMP	PNP	3				6	1	40	150	
2N1518	DEL	PNP	25								
2N1519	DEL	PNP	25								
2N1520	DEL	PNP	25								
2N1521	DEL	PNP	25								
2N1522	DEL	PNP	25								
2N1523	DEL	PNP	25								
2N1524	RCA	PNP	13				12	1		60	
2N1524/33	STL	NPN	9				12	1		60	
2N1525	RCA	PNP	11				12	1		60	
2N1526	RCA	PNP	13				12	1		130	
2N1527	RCA	PNP	11				12	1		130	
2N1528	RAY	NPN	13				6	1	10		100
2N1529	MR CLE	PNP	16				2	1A		70†	
2N1529A	MR	PNP	16				2	500		70†	
2N1530	MR CLE	PNP	16				2	1A		70†	
2N1530A	MR	PNP	16				1	500		70†	
2N1531	MR CLE	PNP	16				1	1A		70†	
2N1531A	MR	PNP	16				2	500		70†	
2N1532	MR CLE	PNP	16				2	1A		70†	
2N1532A	MR	PNP	16				2	500		70†	
2N1533	MR	PNP	16				2	1A		70†	
2N1534	MR CLE DEL	PNP	16				2	1A		120†	
2N1534A	MR	PNP	16				1	500		120†	
2N1535	MR CLE DEL	PNP	16				2	1A		120†	
2N1535A	MR	PNP	16				2	500		120†	
2N1536	MR DEL CLE	PNP	16				1	1A		120†	
2N1536A	MR	PNP	16				2	500		120†	
2N1537	MR DEL CLE	PNP	16				2	1A		120†	
2N1537A	MR	PNP	16				2	500		120†	
2N1538	MR	PNP	16				2	1A		120†	
2N1539	PSI CLE TII DEL	PNP	16				10	100		25†	
2N1539A	MR	PNP	16				2	500		100†	
2N1540	MR CLE TII DEL	PNP	16				2	500		100†	
2N1540A	MR	PNP	16				2	500		100†	
2N1541	MR CLE TII DEL	PNP	16				2	500		100†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40		2.0W†		2N1505
			40		2.0W†		2N1506
			50		800		2N1506A
			25	1A	600		2N1507
				1A	800		2N1508
				1A	800		2N1509
				20	75		2N1510
			40	6A	60.0W†		2N1511
			55	6A	60.0W†		2N1512
			40	6A	60.0W†		2N1513
			55	6A	60.0W†		2N1514
40*			20	10	83		2N1515
33*			20	10	83		2N1516
40*			20	10	300		2N1517
			20	10	100		2N1517A
				25A	70.0W†		2N1518
				25A	70.0W†		2N1519
				35A	70.0W†		2N1520
				35A	70.0W†		2N1521
			40	50A	70.0W†		2N1522
			60	50A	70.0W†		2N1523
				10	80		2N1524
				10	120		2N1524/33
				10	80		2N1525
				10	80		2N1526
				10	80		2N1527
			25	20	150		2N1528
			20	5A	90.0W†		2N1529
			20	5A	90.0W†		2N1529A
			30	5A	60.0W†		2N1530
			30	5A	90.0W†		2N1530A
			40	5A	60.0W†		2N1531
			40	5A	90.0W†		2N1531A
			50	5A	60.0W†		2N1532
			50	5A	90.0W†		2N1532A
			60	5A	60.0W†		2N1533
			20	5A	60.0W†		2N1534
			20	5A	90.0W†		2N1534A
			30	5A	60.0W†		2N1535
			30	5A	90.0W†		2N1535A
			40	5A	60.0W†		2N1536
			40	5A	90.0W†		2N1536A
			50	5A	60.0W†		2N1537
			50	5A	90.0W†		2N1537A
			60	5A	60.0W†		2N1538
			20	5A	60.0W†		2N1539
			20	5A	90.0W†		2N1539A
			30	5A	60.0W†		2N1540
			30	5A	90.0W†		2N1540A
			40	5A	60.0W†		2N1541

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1541A	MR	PNP	16				2	500		100†	
2N1542	MR CLE TII DEL	PNP	16				2	500		100†	
2N1542A	MR	PNP	16				2	500		100†	
2N1543	MR TII DEL	PNP	16				2	500		100†	
2N1544	MR CLE DEL	PNP	16				2	500		130†	
2N1544A	MR	PNP	16				2	500		120†	
2N1545	MR CLE DEL	PNP	16				2	500		130†	
2N1545A	MR	PNP	16				2	500		120†	
2N1546	MR CLE DEL	PNP	16				2	500		130†	
2N1546A	MR	PNP	16				2	500		120†	
2N1547	MR DEL	PNP	16				2	500		130†	
2N1547A	MR	PNP	16				2	500		120†	
2N1548	MR	PNP	16				2	500		130†	
2N1549	MR CLE BEN	PNP	16				2	1A		52†	
2N1549A	MR	PNP	16				2	1A		43†	
2N1550	MR CLE BEN	PNP	16				2	1A		52†	
2N1550A	MR	PNP	16				2	1A		43†	
2N1551	MR CLE	PNP	16				2	1A		52†	
2N1551A	MR	PNP	16				2	1A		43†	
2N1552	MR CLE BEN	PNP	16				2	1A		52†	
2N1552A	MR	PNP	16				2	1A		43†	
2N1553	MR CLE BEN	PNP	16				2	1A		73†	
2N1553A	MR	PNP	16				2	1A		72†	
2N1554	MR CLE BEN	PNP	16				2	1A		73†	
2N1554A	MR	PNP	16				2	1A		72†	
2N1555	MR CLE BEN	PNP	16				2	1A		73†	
2N1555A	MR	PNP	16				2	1A		72†	
2N1556	MR CLE BEN	PNP	16				2	1A		73†	
2N1556A	MR	PNP	16				2	1A		72†	
2N1557	MR CLE BEN	PNP	16				2	1A		125†	
2N1557A	MR	PNP	16				2	1A		125†	
2N1558	MR CLE BEN	PNP	16				2	1A		125†	
2N1558A	MR	PNP	16				2	1A		125†	
2N1559	MR CLE BEN	PNP	16				2	1A		125†	
2N1559A	MR	PNP	16				2	1A		125†	
2N1560	MR CLE BEN	PNP	16				2	1A		125†	
2N1560A	MR	PNP	16				2	1A		125†	
2N1561	MR	PNP	13								
2N1562	MR	PNP	13								
2N1564	NAT TII TT AM CSF	NPN	17				5	5	20	35	50
2N1565	NAT TII TT CSF	NPN	17				5	5	40	70	100
2N1566	NAT TII TT CSF	NPN	17				5	5	80	120	200
2N1566A	RAD TH TIF	NPN	17				5	1	60		150
2N1572	TII TT BEN	NPN	17				5	5		35	
2N1573	TII AM CSF	NPN	17				5	5	40	60	100
2N1574	TII AM CSF	NPN	17				5	5	80	120	200
2N1585	TII	NPN	17				10	10		20†	
2N1586	TII TT	NPN	13				4.5	1		18	
2N1587	TII TT	NPN	13				4.5	1		18	
2N1588	TII TT	NPN	13				4.5	1		18	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	5A	90.0W†		2N1541A
			50	5A	60.0W†		2N1542
			50	5A	90.0W†		2N1542A
			60	5A	60.0W†		2N1543
			20	5A	90.0W†		2N1544
			20	5A	90.0W†		2N1544A
			30	5A	90.0W†		2N1545
			30	5A	90.0W†		2N1545A
			40	5A	90.0W†		2N1546
			40	5A	90.0W†		2N1546A
			50	5A	90.0W†		2N1547
			50	5A	90.0W†		2N1547A
			60	5A	90.0W†		2N1548
			20	15A	90.0W†		2N1549
			20	15A	90.0W†		2N1549A
			30	15A	90.0W†		2N1550
			30	15A	90.0W†		2N1550A
			40	15A	90.0W†		2N1551
			40	15A	90.0W†		2N1551A
			50	15A	90.0W†		2N1552
			50	15A	90.0W†		2N1552A
			20	15A	90.0W†		2N1553
			20	15A	90.0W†		2N1553A
			30	15A	90.0W†		2N1554
			30	15A	90.0W†		2N1554A
			40	15A	90.0W†		2N1555
			40	15A	90.0W†		2N1555A
			60	15A	90.0W†		2N1556
			50	15A	90.0W†		2N1556A
			20	15A	90.0W†		2N1557
			20	15A	90.0W†		2N1557A
			30	15A	90.0W†		2N1558
			30	15A	90.0W†		2N1558A
			40	15A	90.0W†		2N1559
			40	15A	90.0W†		2N1559A
			50	15A	90.0W†		2N1560
			50	15A	90.0W†		2N1560A
			25	250	250		2N1561
			25	250	250		2N1562
			60	50	600		2N1564
			60	50	600		2N1565
			60	50	600		2N1566
			60	100	600		2N1566A
			80		600		2N1572
			80		600		2N1573
			80		600		2N1574
				100	300		2N1585
				25	150		2N1586
				25	150		2N1587
				25	150		2N1588

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1589	TII TT	NPN	5				4.5	1		50	
2N1590	TII TT	NPN	5				4.5	1		50	
2N1591	TII	NPN	5				5	1		50	
2N1592	TII TT	NPN	5				4.5	1		140	
2N1593	TII TT	NPN	5				4.5	1		140	
2N1594	TT TII	NPN	5				4.5	1		140	
2N1605	RAY SYL GI TAD TII	NPN	13				0.25	20	40†	60†	120†
2N1605A	SYL RAY TAD	NPN	13				0.25	20	40†	60†	
2N1606	PCO	PNP	13				0.5	15	6†		
2N1607	PCO	PNP	13				0.5	15	6†		
2N1608	PCO	PNP	13				0.5	15	6†		
2N1609	DEL	PNP	57				2	100	30†		75†
2N1610	DEL	PNP	57				2	100	50†		125†
2N1611	DEL	PNP	57				2	100	30†		75†
2N1612	DEL	PNP	57				2	100	50†		125†
2N1613	RHE NOR ME AM HA RCA	NPN	17				10	5	35	70	150
2N1613 A	TII	NPN	17								
2N1614	SYL ETC GE	PNP	11				1	20	18†	32†	43†
2N1616	TT TH STC SIL GE	NPN	35				15	200	10		20
2N1617	FAN TT GE STC TH	NPN	35				12	2A	15†	30†	75†
2N1617A	SIL	NPN	35				2	12A	15†		75†
2N1617A/I	SIL	NPN	35				2	12A	15†		75†
2N1618	FAN TT GE STC TH	NPN	35				12	2A	15†	30†	75†
2N1618A	SIL	NPN	35				4	5A	10†		
2N1618A/I	SIL	NPN	35				4	5A	10†		
2N1620	FAN SIL	NPN	75				12	2A	15†		75†
2N1623	RAY CRY	PNP	13				6	1			
2N1624	GI ETC	NPN	13				0.5	30	60†	14	120†
2N1631	RCA	PNP	11				12	1		80	
2N1632	RCA	PNP	13				12	1		80	
2N1633	RCA	PNP	11				12	1		75	
2N1634	RCA	PNP	13				12	1		75	
2N1635	RCA	PNP	11				12	1		75	
2N1636	RCA	PNP	13				12	1		75	
2N1637	RCA	PNP	13				12	1		80	
2N1638	RCA	PNP	13				12	1		75	
2N1638/33	SYL	PNP	9				12	1		75	
2N1639	RCA	PNP	13				12	1		75	
2N1640	CRY	PNP	13				6	1		11	
2N1641	CRY	PNP	13				6	1		15	
2N1642	CRY	PNP	13				6	1		23	
2N1643	CRY	PNP	13				6	1	10	18	25
2N1644	MR RHE	NPN	17				10	150	40†		120†
2N1644A	HOF	NPN	17				10	15		75†	
2N1645	WE	PNP	17				10	50	9†		200†
2N1646	SYL TII	PNP	13				0.4	10	20†		
2N1647	TT SIL	NPN	74				10	100	12†	18†	
2N1648	TT SIL	NPN	74				10	100	12†	18†	
2N1649	TT SIL	NPN	74				10	100	20†	35†	
2N1650	TT SIL	NPN	74				10	100	20†	35†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
				25	150		2N1589
				25	150		2N1590
				25	150		2N1591
				25	150		2N1592
				25	150		2N1593
				25	150		2N1594
			24	100	150		2N1605
			40	100	200		2N1605A
				50	100		2N1606
				50	100		2N1607
				50	100		2N1608
			60	1.5A	4.5W†		2N1609
			60	1.5A	4.5W†		2N1610
			40	1.5A	4.5W†		2N1611
			40	1.5A	4.5W†		2N1612
10.5	0.3	7	40	500	800		2N1613
					1.0W†		2N1613A
5	1	20	40	300	240		2N1614
			60	5A	85.0W†		2N1616
			80	5A	85.0W†		2N1617
			70	5A	60.0W†		2N1617A
			70	5A	60.0W†		2N1617A/I
			100	5A	85.0W†		2N1618
			100	7.5A	85.0W†		2N1618A
			100	7.5A	85.0W†		2N1618A/I
			80	5A	60.0W†		2N1620
6	1	18	20	50	250		2N1623
			25		150		2N1624
				10	80		2N1631
				10	80		2N1632
				10	80		2N1633
				10	80		2N1634
				10	80		2N1635
				10	80		2N1636
				10	80		2N1637
				10	80		2N1638
				10	120		2N1638/33
				10	80		2N1639
			20	50	250		2N1640
			20	50	250		2N1641
			30	50	250		2N1642
			25	50	250		2N1643
			45		600		2N1644
					600		2N1644A
			20	300			2N1645
			15	50	150		2N1646
			60	3A	40.0W†		2N1647
			80	3A	40.0W†		2N1648
			60	3A	40.0W†		2N1649
			120	3A	40.0W†		2N1650

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1651	BEN	PNP	16								
2N1652	BEN	PNP	16								
2N1653	BEN	PNP	16								
2N1654	RAY CRY	PNP	13				6	1		14	
2N1655	RAY CRY	PNP	13				6	1		14	
2N1656	RAY CRY	PNP	13				6	1		14	
2N1657	RAY	NPN	34				5	1A	15†		
2N1658	MH	PNP	85				2	200	30†	50†	90†
2N1658/13	KSC	PNP	17/27					0.2	30†		90†
2N1658A/13	KSC	PNP						200	30†		90†
2N1659	MH	PNP	85				2	200	30†	50†	90†
2N1659/13	KSC	PNP	17/27					0.2	30†		90†
2N1659A/13	KSC	PNP						200	30†		90†
2N1660	RAY TYC	NPN	75				15	1A	45†	90†	135†
2N1661	RAY TYC	NPN	75				15	1A	45†	90†	135†
2N1662	RAY TYC	NPN	75				15	1A	45†	90†	135†
2N1663	PCO	NPN	13				1	20		50†	
2N1664	MR	PNP	13				6	1	45†		120†
2N1665	MR	PNP	13				6	10	5		
2N1666	AMP	PNP	16				1A		32†		
2N1667	AMP	PNP	16				1A		90†		
2N1668	AMP	PNP	16				1A		50†		
2N1669	AMP	PNP	16				1A		70†		
2N1670	GI	PNP	13				0.5	10	15†		
2N1672	GI CPC TAD	NPN	13				6	1	15	50	125
2N1672A	GI	NPN	13				5	1	20†		
2N1673	SYL	PNP	9				10.5	1		100	
2N1674	TT	NPN	13				5	1	50		
2N1675	WE	NPN	69				10	1A	25†	44†	
2N1676	SPR	PNP	17				3	1	10		
2N1677	PCO SPR	PNP	13				3	1	25		45
2N1678	GI	PNP	13				4.5	1		25	
2N1679	TII	NPN					3.6	60C	40†		
2N1680	TII	NPN					3.6	600	40†		
2N1681	TS	PNP	13				0.25	10		75†	
2N1682	NAT	NPN	17				1	10		20†	
2N1683	RCA AT TII	PNP	13				3	10	60	130	
2N1684	SYL	PNP	9								
2N1685	SYL	NPN	9				0.75	100		60†	
2N1690	TII SEC STC SIL	NPN	68				10	500	20†		60†
2N1691	TII SEC STC SIL	NPN	68				10	500	20†		60†
2N1692	MR	PNP	72								
2N1693	MR	PNP	72								
2N1694	GE	NPN	12				1	2	15†	25†	45†
2N1699	SYL	PNP	9				12	1.5		100	
2N1700	RCA	NPN	13				4	100	20		
2N1701	RCA SEC STC SIL	NPN	13				4	300	20†		80†
2N1702	RCA SEC STC	NPN	16				4	800	15†		60†
2N1703	RCA SEC STC	NPN	25				4	800	15†		60†
2N1704	NAT	NPN	17				1		50†		200†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			60	25A	100.0W†		2N1651
			100	25A	100.0W†		2N1652
			120	25A	100.0W†		2N1653
6	1	18	80	50	250		2N1654
6	1	18	125	50	250		2N1655
6	1	18	125	50	250		2N1656
			60		55.0W†		2N1657
			50	1A			2N1658
			50	1A	15.0W†		2N1658/13
				1A			2N1658A/13
			40	1A			2N1659
			40	1A	15.0W†		2N1659/13
				1A			2N1659A/13
			60	2A	85.0W†		2N1660
			80	2A	85.0W†		2N1661
			100	2A	85.0W†		2N1662
				100	150		2N1663
			45	200			2N1664
				50	150		2N1665
			60	6A	13.0W†		2N1666
			32	6A	13.0W†		2N1667
			32	6A	13.0W†		2N1668
			32	6A	13.0W†		2N1669
					120		2N1670
			40		120		2N1672
					120		2N1672A
				10	80		2N1673
				25	200		2N1674
60				10A			2N1675
				50	120		2N1676
				50	120		2N1677
60					120		2N1678
				1A	800		2N1679
				1A	800		2N1680
15			200		180		2N1681
							2N1682
			12	100	150		2N1683
			25	100	100		2N1684
			20	200	100		2N1685
				500	40.0W†		2N1690
			120	500	40.0W†		2N1691
				500	3.0W		2N1692
				500	3.0W		2N1693
				25	75		2N1694
20			10		100		2N1699
				1A	5.0W†		2N1700
40			2.5A		25.0W†		2N1701
40				5A			2N1702
40				5A			2N1703
					500		2N1704

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1705	TS	PNP	13				6	1	70	110	150
2N1706	TS	PNP	13				5	10		90	
2N1707	TS	PNP	13				5	10	40		150
2N1708	RCA RAY	NPN	13				1	10	20†		
2N1708A	NAT	NPN	17				1	10	30†		120†
2N1709	PSI CSF	NPN	13								
2N1710	PSI CSF	NPN	13								
2N1711	HA GE ME AM RAY NOR	NPN	17				5	1	50	115	200
2N1711A	FC	NPN	17				5	1	50	115	200
2N1714	TII SSP	NPN	17	50	10 μ A	50 μ A	5	10	10†	30†	
2N1715	TII	NPN	17	90	10 μ A	50 μ A	5	10	10†	30†	
2N1716	TII SSP	NPN	17	50	10 μ A	50 μ A	5	10	20†	50†	
2N1717	TII	NPN	17	90	10 μ A	50 μ A	5	10	20†	50†	
2N1718	TII SSP	NPN	73	50	10 μ A	50 μ A	5	10	10†	30†	
2N1719	TII	NPN	73	90	10 μ A	50 μ A	5	10	10†	30†	
2N1720	TII SSP	NPN	73	50	10 μ A	50 μ A	5	10	20†	50†	
2N1721	TII	NPN	73	90	10 μ A	50 μ A	5	10	20†	50†	
2N1722	TII SIL TT	NPN	34								
2N1722A	TII	NPN	75								
2N1722/I	SIL	NPN	75								
2N1723	TII	NPN	75								
2N1724	TII SIL GE TH	NPN	35								
2N1724A	TII TH	NPN	35								
2N1724/I	SIL	NPN	35								
2N1725	MR GE TH	NPN	35				15	100	50†		
2N1726	PCO	PNP	13				6	1			120†
2N1727	PCO	PNP	13				6	1			150†
2N1728	PCO	PNP	13				6	1			100†
2N1742	PCO SC	PNP	13				10	2	10†	33†	
2N1743	PCO SC	PNP	13				10	1	10†	33†	
2N1744	PCO SC	PNP	13				10	2		33†	
2N1745	PCO SC	PNP	13				10	2	10†	33†	
2N1746	PCO	PNP	13				6	1		60†	
2N1747	PCO	PNP	13				6	1		60†	
2N1748	PCO SC	PNP	13				6	1		45†	
2N1748A	PCO	PNP	13				6	1	50	70	150
2N1749	PCO SC	PNP	13				6	1	30	45	150
2N1750	PCO SC	PNP	13				3	0.5		30	
2N1751	BEN	PNP	16								
2N1752	PCO	PNP	13				6	1		250	
2N1754	PCO SPR GI	PNP	13				0.5	40		50†	
2N1755	BC CLE	PNP	63				2	500	30†		75†
2N1756	BC CLE	PNP	63				2	500	30†		75†
2N1757	BC CLE	PNP	63				2	500	30†		75†
2N1758	BC CLE	PNP	63				2	500	30†		75†
2N1759	BC CLE	PNP	63				2	500	60†		150†
2N1760	BC CLE	PNP	63				2	500	60†		150†
2N1761	BC CLE	PNP	63				2	500	60†		150†
2N1762	BC CLE	PNP	63				2	500	60†		150†
2N1768	RCA SEC SIL	NPN	68				4	750	35†		100†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
6	1	6	12	400	200		2N1705
			18	400	200		2N1706
				400	200		2N1707
			20	200	300		2N1708
				500	300		2N1708A
10	0.3	5	60	1.2A	2.5W		2N1709
			45	1.2A	2.5W		2N1710
			28		800		2N1711
					1.0W		2N1711A
			60	750	800		2N1714
			60	750	800		2N1716
			100	750	800		2N1715
			100	750	800		2N1717
			60	750	2.0W		2N1718
			100	750	2.0W		2N1719
			60	750	2.0W		2N1720
			100	750	2.0W		2N1721
			80	7.5A			2N1722
			120	5A	3.0W		2N1722A
			80	5A	85.0W†		2N1722/I
			80	5A	3.0W		2N1723
			80	5A	3.0W		2N1724
			120	5A	3.0W		2N1724A
			80	5A	85.0W†		2N1724/I
			80	5A	3.0W		2N1725
				50	60		2N1726
				50	60		2N1727
				50	60		2N1728
			15	50	60		2N1742
			15	50	60		2N1743
			15	50	60		2N1744
			20	50	60		2N1745
				50	60		2N1746
				50	60		2N1747
				50	60		2N1748
			25	50	60		2N1748A
			30	10	75		2N1749
				5	15		2N1750
			75	15A	100.0W†		2N1751
				50	60		2N1752
				100	50		2N1754
				3A	28.0W†		2N1755
				3A	28.0W†		2N1756
				3A	28.0W†		2N1757
				3A	28.0W†		2N1758
				3A	28.0W†		2N1759
				3A	28.0W†		2N1760
				3A	28.0W†		2N1761
				3A	28.0W†		2N1762
			40	3A	40.0W†		2N1768

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N1769	RCA SEC SIL	NPN	68				4	750	35†		100†
2N1779	SYL	NPN	13				0.75	100		40†	
2N1780	SYL	NPN	13				0.75	100		40†	
2N1781	SYL	NPN	13				0.25	20		60†	
2N1782	SYL	PNP	13				0.35	200		30†	
2N1783	SYL	PNP	13				60	0.1		60	
2N1784	SYL	PNP	13				0.35	10		40†	
2N1785	PCO	PNP	13				6	1		60†	
2N1786	PCO	PNP	13				6	1		60†	
2N1787	PCO	PNP	13				6	1		60†	
2N1788	PCO	PNP	13				12	1		50	
2N1789	PCO	PNP	13				12	1		60†	
2N1790	PCO	PNP	13				12	1		60	
2N1799	SYL	NPN	13				0.5	30	20†	60†	
2N1808	TII	NPN	17				0.25	20		125†	
2N1809	WES	NPN	84								
2N1810	WES	NPN	84								
2N1811	WES	NPN	84								
2N1812	WES	NPN	84								
2N1816	WES	NPN	84								
2N1817	WES	NPN	84								
2N1818	WES	NPN	84								
2N1819	WES	NPN	84								
2N1823	WES	NPN	84								
2N1824	WES	NPN	84								
2N1825	WES	NPN	84								
2N1826	WES	NPN	84								
2N1837	PSI GE	NPN	13				10	150	40†	75†	120†
2N1838	PSI	NPN	13				10	100	40†	90†	150†
2N1839	PSI	NPN	13				10	100	12†	25†	50†
2N1840	PSI	NPN	13				10	150	10†		
2N1841	WE	NPN	13				10	500	30		100
2N1853	RCA	PNP	17				0.4	6	30†		
2N1854	RCA	PNP	17				1	50			400†
2N1864	PCO	PNP	13				6	1		70	
2N1865	PCO	PNP	13				6	1	25		
2N1866	PCO	PNP	13				12	1	25		
2N1867	PCO	PNP	13				12	1	10		
2N1868	PCO	PNP	13				10	2		33†	
2N1872	UST	PNP	13				1	50		95	
2N1873	UST ETC	PNP	13				1	50		95†	
2N1874	UST	PNP					0.25	400	100		
2N1875	UST	PNP					1	150	100		
2N1886	TT SIL	NPN	35				10	500	20†	40†	80†
2N1889	TII HA ME AM GE BC	NPN	17				5	1	30		
2N1890	TII HA ME AM GE BC	NPN	17				10	1	20†		
2N1893	FC GE HA STC AM ME BC	NPN	13				5	1	30	70	100
2N1894	RAY	NPN	35				15	1A	12†	30†	60†
2N1895	RAY	NPN	35				15	1A	12†	30†	60†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			55	3A	40.0W†		2N1769
			20	100	100		2N1779
			25	100	100		2N1780
			20	100	100		2N1781
			20	100	100		2N1782
			15	100	100		2N1783
			20	100	100		2N1784
				50	45		2N1785
				50	45		2N1786
				50	45		2N1787
				50	45		2N1788
				50	60		2N1789
				50	60		2N1790
			20	100	100		2N1799
			25	300	150		2N1808
			50	30A	250.0W†		2N1809
			100	30A	250.0W†		2N1810
			150	30A	250.0W†		2N1811
			200	30A	250.0W†		2N1812
			50	30	250.0W†		2N1816
			100	30A	250.0W†		2N1817
			150	30A	250.0W†		2N1818
			200	30A	250.0W†		2N1819
			50	30A	250.0W†		2N1823
			100	30A	250.0W†		2N1824
			150	30A	250.0W†		2N1825
			200	30A	250.0W†		2N1826
			50		800		2N1837
			30		600		2N1838
			30		600		2N1839
			20		600		2N1840
			50	2A			2N1841
			6	100	150		2N1853
			17	100	150		2N1853/18
			6	100	150		2N1854
				50	60		2N1864
				50	60		2N1865
				50	60		2N1866
				50	60		2N1867
				50	60		2N1868
				50	125		2N1872
				200	125		2N1873
				400	150		2N1874
				300	150		2N1875
			60	5A	40.0W†		2N1886
			60		800		2N1889
			60		800		2N1890
			80	500	800		2N1893
			60		85.0W†		2N1894
			80		85.0W†		2N1895

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2N1896	RAY	NPN	35				15	1A	45†	90†	135†
2N1897	RAY NOR TH	NPN	35				15	1A	45†	90†	135†
2N1898	RAY	NPN	35				15	1A	45†	90†	135†
2N1899	PSI NOR	NPN	69				10	150	40†		120†
2N1900	PSI	NPN	69								
2N1901	PSI	NPN	69								
2N1905	RCA	PNP	16				2	1A	50†	90†	150†
2N1906	RCA	PNP	13				2	1	75	125	200
2N1907	TIL	PNP	16				1.5	1A	80†Δ		
2N1908	TIL	PNP	16				1.5	1A	80†Δ		
2N1917	SP KSC CRY	PNP	17				6	1	25	50	
2N1918	SP KSC CRY	PNP	17				6	1	25	50	
2N1919	SP CRY	PNP	17								
2N1920	SP CRY	PNP	17								
2N1921	SP NAT CRY	PNP	17								
2N1922	SP NAT CRY	PNP	17								
2N1924	GE TII CSF	PNP	17				5	1	30	45	64
2N1925	GE TII CSF	PNP	17				5	1	44	65	88
2N1926	GE TII CSF	PNP	17				5	1	60	80	120
2N1936	TII	NPN	35	50		15mA	10	1A	15		90
2N1937	TII	NPN	35	50		15mA	10	1A	15		90
2N1944	IND	NPN	13				2	100		300	
2N1945	IND	NPN	13				2	100		300	
2N1946	IND	NPN	13				2	100		300	
2N1947	IND	NPN	13				2	100		650	
2N1948	IND	NPN	13				2	100		650	
2N1949	IND	NPN	13				2	100		650	
2N1950	IND	NPN	13				2	100		375	
2N1951	IND	NPN	13				2	100		375	
2N1952	IND	NPN	13				2	100		375	
2N1954	RAY	PNP	13				0.5	20	30†		120†
2N1955	RAY	PNP	13				0.5	20	50†		200†
2N1956	RAY	PNP	13				0.5	20	30†		120†
2N1957	RAY	PNP	13				0.5	20	30†		120†
2N1958	SYL	NPN	17								
2N1958A	SYL	NPN	17								
2N1958A/51	SYL	NPN	81								
2N1959	SYL	NPN	17								
2N1959A	SYL	NPN	17								
2N1959A/51	SYL	NPN	81								
2N1959B	SYL	NPN	17								
2N1960	SYL	PNP	17				0.2	10	25†		
2N1961	SYL	PNP	17				0.2	10	20†		
2N1961/46	SYL		13				0.2	10	20†		
2N1962	SYL	NPN	17				1	10	20†		80†
2N1962/46	SYL	NPN	17				1	10	20†		80†
2N1963	SYL	NPN	17				1	10	25†		
2N1964	SYL	NPN	17				10	150	20†		60†
2N1965	SYL	NPN	17				10	150	40†		120†
2N1969	SYL	PNP	17								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			16		85.0W†		2N1896
			80		85.0W†		2N1897
			100		85.0W†		2N1898
			100	10A	125.0W†		2N1899
			100	15A	125.0W†		2N1900
			100	15A	125.0W†		2N1901
			40	10A	50.0W†		2N1905
			40	10A	50.0W†		2N1906
			40	20A	60.0W†	Δ with Heat Sink	2N1907
			50	20A	60.0W†	Δ with Heat Sink	2N1908
6	1	25	8	50	250		2N1917
6	1	25	8	50	250		2N1918
			18	50	250		2N1919
			18	50	250		2N1920
			50	50	250		2N1921
			80	50	250		2N1922
			40	500	200		2N1924
6	1	40		500	200		2N1925
6	1	40		500	200		2N1926
			60	20A	4.0W		2N1936
			80	20A	4.0W		2N1937
					600		2N1944
					600		2N1945
					600		2N1946
					600		2N1947
					600		2N1948
					600		2N1949
					600		2N1950
					600		2N1951
					600		2N1952
				1A	210		2N1954
				1A	210		2N1955
				1A	210		2N1956
				1A	210		2N1957
			40	500	600		2N1958
				1A	600		2N1958A
				1A	300		2N1958A/51
			40	500	600		2N1959
				1A	600		2N1959A
				1A	300		2N1959A/51
				1A	600		2N1959B
			15	200	150		2N1960
			12	200	150		2N1961
			12	200	150		2N1961/46
			20	200	400		2N1962
			20	200	400		2N1962/46
			15	200	400		2N1963
				500	400		2N1964
				500	400		2N1965
			15	400	150		2N1969

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2N1970	DEL	PNP	25				2	5A	17†		40†
2N1971	DEL	PNP	16					500	25†		60†
2N1972	PC GE	NPN	17								
2N1973	NOR ME AM GE HA	NPN	17				5	1	76	125	200
2N1974	NOR ME AM GE HA	NPN	17				5	1	36	65	90
2N1975	NOR ME AM GE HA	NPN	17				5	1	18	38	50
2N1978	PC	NPN					5	500	20†		
2N1980	MR	PNP	25				2	5A	50		100
2N1981	MR	PNP	25				2	5A	50		100
2N1982	MR	PNP	25				2	5A	50		100
2N1983	NOR ME AM GE	NPN	17				5	1	70		210
2N1984	NOR ME AM GE	NPN	17				5	1	35		110
2N1985	NOR ME AM GE	NPN	17				5	1	15		45
2N1986	NOR ME AM CSF	NPN	17				5	1	15		
2N1987	NOR ME AM CSF	NPN	17								
2N1988	NOR AM FC	NPN	17				5	1	20		100
2N1989	NOR AM FC	NPN	17				5	1	10		
2N1990	FC ME COS	NPN	17								
2N1990/46	SYL	NPN	17								
2N1990R	TH	NPN	17				0.5	2	25†		
2N199GS	TH	NPN	17				0.5	2	25†		
2N1991	TII TT HA FC	PNP	13/17				10	150	15†		60†
2N1993	SYL	NPN	17				1	10	50†		300†
2N1994	TII	NPN	17				5	1		50	
2N1995	TII	NPN	17				5	1		75	
2N1996	TII	NPN	17				5	1		100	
2N1997	TII	PNP	17				1	100	40†	70†	200†
2N1998	UST TII	PNP	17				1	100	70†	90†	225†
2N1999	TII TT	PNP	17				1	100	100†	150†	350†
2N2000	TII	PNP	17				0.5	500	50†		300†
2N2001	TII	PNP	17				0.5	500	60†		
2N2002	NAT	PNP	17								
2N2003	NAT	PNP	17								
2N2004	NAT KSC CRY	PNP	17								
2N2005	NAT	PNP	17								
2N2006	NAT	PNP	17								
2N2007	NAT	PNP	17								
2N2008	RAY	NPN	17				50	5		65	
2N2015	RCA SIL	NPN	25				4	1A		37†	
2N2016	GE SIL	NPN	25				10	200	12		36
2N2017	GE	NPN	13				10	1	30		
2N2018	TT	NPN	126				10	100	15†	23†	
2N2019	TT	NPN	126				10	100	15†	23†	
2N2020	TT	NPN	126				10	100	25†	4†	
2N2021	TT	NPN	126				10	100	25†	†	
2N2032	SIL	NPN	75				12	2A	20†		
2N2032/I	SIL	NPN	75				12	2A	20†		
2N2033	SIL	NPN	17								
2N2034	SIL	NPN	17								
2N2035	SIL	NPN	13				4	1.5A	20†		60†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			50	15A	170.0W†		2N1970
				4A	37.5W†		2N1971
			30		100		2N1972
10	0.3	12*	60	500	800		2N1973
10	0.3	15*	60	500	800		2N1974
10	0.3	18*	60	500	800		2N1975
			40		30.0W†		2N1978
			30	15A	170.0W†		2N1980
			40	15A	170.0W†		2N1981
			50	15A	170.0W†		2N1982
			25		600		2N1983
			25		600		2N1984
			25		600		2N1985
			25		600		2N1986
			25		600		2N1987
			45		600		2N1988
			45		600		2N1989
			100		600		2N1990
					400		2N1990/46
					250		2N1990R
					600		2N1990S
			20	600	600		2N1991
			18	300	150		2N1993
			30	300	150		2N1994
			25	300	150		2N1995
			20	300	150		2N1996
							2N1997
				200	200		2N1998
			20	500	250		2N1999
				1A	300		2N2000
				1A	300		2N2001
				100	250		2N2002
				100	250		2N2003
			15	100	250		2N2004
				100	250		2N2005
				100	250		2N2006
				100	250		2N2007
							2N2008
			50	10A	150.0W†		2N2015
			65	10A	150.0W†		2N2016
			60	1A	1.0W		2N2017
			150		40.0W†		2N2018
			200		40.0W†		2N2019
			150		40.0W†		2N2020
			200		40.0W†		2N2021
				3A	85.0W†		2N2032
				3A	85.0W†		2N2032/I
			80	3A	8.7W		2N2033
				3A	8.7W		2N2034
			60	3A	25.0W†		2N2035

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2N2036	SIL	NPN	57				4	2A	20†		60†
2N2038	TII TT	NPN	17				6	200	12†		36†
2N2039	TII TT	NPN	17				6	200	12†		36†
2N2040	TII TT	NPN	17				6	200	30†		90†
2N2041	TII TT	NPN	17				6	200	30†		90†
2N2042	MR	NPN	17				0.4	5	20†		50†
2N2042A	MR	PNP	17				6	1	20		80
2N2043	MR	NPN	17				0.4	5	40†		100†
2N2043A	MR	PNP	17				6	1	45		180
2N2048	PCO	PNP	13				0.5	10	50†	125†	300†
2N2049	FC SGS AM GE	NPN	17				5	1	75		
2N2060	AM SYL TII TH	NPN	102				5	1	50		150
2N2060A	AM TH	NPN	102				5	1	50		150
2N2061	BC CLE	PNP	16				2	2A	10†		
2N2062	BC CLE	PNP	16				2	2A	20†		
2N2062A	BC	PNP	16				2	2A	50†		140†
2N2063	BC CLE	PNP	16				2	2A	10†		
2N2064	BC CLE	PNP	16				2	2A	20†		
2N2064A	BC	PNP	16				2	2A	50†		140†
2N2065	BC CLE	PNP	16				2	2A	10†		
2N2066	BC CLE	PNP	16				2	2A	20†		
2N2066A	BC	PNP	16				2	2A	50†		140†
2N2067	BC CLE	PNP	63				14	500	20†		
2N2067-B	BC CLE	PNP	63				14	500	15†		
2N2067-Gn	BC CLE	PNP	63				14	500	25†		
2N2067-0	BC CLE	PNP	63				14	500	20†		
2N2067-W	BC CLE	PNP	63				14	500	33†		
2N2068	BC CLE	PNP	63				14	500	20†		
2N2068-Gn	BC CLE	PNP	63				14	500	25†		
2N2068-0	BC CLE	PNP	63				14	500	20†		
2N2069	BC CLE	PNP	16								
2N2070	BC CLE	PNP	16								
2N2071	BC	PNP	16								
2N2072	BC	PNP	16								
2N2075	DEL	PNP	25					5A	20†		40†
2N2075A	MR	PNP	25				2	1.2A	25†		100†
2N2076	DEL	PNP	25				2	5A	20†		40†
2N2076A	MR	PNP	25				2	1.2A	25†		100†
2N2077	DEL	PNP	25				2	5A	20†		40†
2N2077A	MR	PNP	25				2	1.2A	25†		100†
2N2078	DEL	PNP	25				2	5A	20†		40†
2N2078A	MR	PNP	25				2	1.2A	25†		100†
2N2079	DEL	PNP	25				2	5A	35†		75†
2N2079A	MR	PNP	25				2	1.2A	40†		160†
2N2080	DEL	PNP	25				2	5A	35†		70†
2N2080A	MR	PNP	25				2	1.2A	40†		160†
2N2081	DEL	PNP	25				2	5A	35†		70†
2N2081A	MR	PNP	25				2	1.2A	40†		160†
2N2082	DEL	PNP	25				2	5A	35†		70†
2N2082A	MR	PNP	25				2	1.2A	40†		160†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
			60	3A	17.5W†		2N2036
			45		600		2N2038
			75		600		2N2039
			45		600		2N2040
			75		600		2N2041
				200	200		2N2042
				200	200		2N2042A
				200	200		2N2043
				200	200		2N2043A
			15	100	150		2N2048
10	0.1	3*	50		800		2N2049
10	0.3	8*	60	500	500		2N2060
10	0.3	8*	60		500		2N2060A
			20	3A	10.0W†		2N2061
				3A	75.0W†		2N2062
				5A	90.0W†		2N2062A
				3A	75.0W†		2N2063
				3A	75.0W†		2N2064
				5A	90.0W†		2N2064A
							2N2065
				3A	75.0W†		2N2066
				5A	90.0W†		2N2066A
				3A	10.0W†		2N2067
				3A	10.0W†		2N2067-B
				3A	10.0W†		2N2067-Gn
				3A	10.0W†		2N2067-O
				3A	10.0W†		2N2067-W
				3A	10.0W†		2N2068
				3A	10.0W†		2N2068-Gn
				3A	10.0W†		2N2068-O
							2N2069
							2N2070
							2N2071
							2N2072
							2N2075
			65	15A	170.0W†		
			65	15A	170.0W†		2N2075A
			55	15A	170.0W†		2N2076
			55	15A	170.0W†		2N2076A
			45	15A	17.0W†		2N2077
			45	15A	170.0W†		2N2077A
			25	15A	170.0W†		2N2078
			25	15A	170.0W†		2N2078A
			65	15A	170.0W†		2N2079
			65	15A	170.0W†		2N2079A
			55	15A	170.0W†		2N2080
			55	15A	170.0W†		2N2080A
			45	15A	170.0W†		2N2081
			45	15A	170.0W†		2N2081A
			25	15A	170.0W†		2N2082
			25	15A	170.0W†		2N2082A

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
2N2084	AMP	PNP	9				6	1	40	100	250
2N2086	PCO	NPN	13				1.5	150	20†	70†	
2N2087	PCO	NPN	17				1	150	40†	65†	120†
2N2090	AMP	PNP	3				6	1	40	150	
2N2092	AMP	PNP	3				6	1		150	
2N2093	AMP	PNP	3				6	1		150	
2N2096	SFR	PNP	13				1.5	400	15†	40†	
2N2097	SFR	PNP	13				1.5	400	20†	50†	
2N2099	SFR	PNP	13				1.5	400	15†	40†	
2N2100	SFR	PNP	13				1.5	400	20†	50†	
2N2101	AMP	NPN					15	1A	15†		60†
2N2102	RCA	NPN	13				5	1	30		100
2N2104	NOR	PNP	17								
2N2105	NOR	PNP	17								
2N2106	GE	NPN	17								
2N2107	GE	NPN	17								
2N2108	GE	NPN	17				10	1	30		
2N2109	WES	NPN	140								
2N2110	WES	NPN	140								
2N2111	WES	NPN	140								
2N2112	WES	NPN	140								
2N2116	WES	NPN	140								
2N2117	WES	NPN	140								
2N2118	WES	NPN	140								
2N2119	WES	NPN	140								
2N2121	FC	PNP	17				1	50	30†	67†	130†
2N2123	WES	NPN	140								
2N2124	WES	NPN	140								
2N2125	WES	NPN	140								
2N2126	WES	NPN	140								
2N2128	MR	PNP	16				2	3A	20†		50†
2N2137	MR	PNP	16				2	500	30†	45†	60†
2N2137A	MR	PNP	16				2	500	30†	45†	60†
2N2138	MR	PNP	16				2	500	30†	45†	60†
2N2138A	MR	PNP	16				2	500	30†	45†	60†
2N2139	MR	PNP	16				2	500	30†	45†	60†
2N2139A	MR	PNP	16				2	500	30†	45†	60†
2N2140	MR	PNP	16				2	500	30†	45†	60†
2N2140A	MR	PNP	16				2	500	30†	45†	60†
2N2141	MR	PNP	16				2	500	30†	45†	60†
2N2141A	MR	PNP	16				2	500	30†	45†	60†
2N2142	MR	PNP	16				2	500	50†	70†	100†
2N2142A	MR	PNP	16				2	500	50†	70†	100†
2N2143	MR	PNP	16				2	500	50†	70†	100†
2N2143A	MR	PNP	16				2	500	50†	70†	100†
2N2144	MR	PNP	16				2	500	50†	70†	100†
2N2144A	MR	PNP	16				2	500	50†	70†	100†
2N2145	MR	PNP	16				2	500	50†	70†	100†
2N2145A	MR	PNP	16				2	500	50†	70†	100†
2N2146	MR	PNP	16				2	500	50†	70†	100†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			80	10	100		2N2084
			80	500	600		2N2086
			80	500	600		2N2087
				10	100		2N2090
				15A			2N2092
				10	100		2N2093
			20	500	250		2N2096
			35	500	250		2N2097
			20	500	250		2N2099
			35	500	250		2N2100
				3A	75.0W†		2N2101
			80	1A	1.0W		2N2102
			35	600	800		2N2104
			35	600	800		2N2105
			60		1.0W		2N2106
			60	5A	1.0W		2N2107
			60		1.0W		2N2108
			50	30A	250.0W†		2N2109
			100	30A	250.0W†		2N2110
			150	30A	250.0W†		2N2111
			200	30A	250.0W†		2N2112
			50	30A	250.0W†		2N2116
			100	30A	250.0W†		2N2117
			150	30A	250.0W†		2N2118
			200	30A	250.0W†		2N2119
							2N2121
			50	30A	250.0W†		2N2123
			100	30A	250.0W†		2N2124
			150	30A	250.0W†		2N2125
			200	30A	250.0W†		2N2126
							2N2128
			20	3A	70.0W†		2N2137
			20	3A	62.5W†		2N2137A
			30	3A	70.0W†		2N2138
			30	3A	62.5W†		2N2138A
			45	3A	70.0W†		2N2139
			45	3A	62.5W†		2N2139A
			60	3A	70.0W†		2N2140
			60	3A	62.5W†		2N2140A
			65	3A	70.0W†		2N2141
			65	3A	62.5W†		2N2141A
			20	3A	70.0W†		2N2142
			20	3A	62.5W†		2N2142A
			30	3A	70.0W†		2N2143
			30	3A	62.5W†		2N2143A
			45	3A	70.0W†		2N2144
			45	3A	62.5W†		2N2144A
			60	3A	70.0W†		2N2145
			60	3A	62.5W†		2N2145A
			65	3A	70.0W†		2N2146

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N2146A	MR	PNP	16				2	500	50†	70†	100†
2N2147	RCA	PNP	16				2	1A	100†	150†	
2N2148	RCA	PNP	16				2	1A	40†	80†	
2N2150	TII GE	NPN	126	80		50 μ A	30	100A	20		80
2N2151	TII GE	NPN	126	80		50 μ A	30	100A	40		160
2N2152A	MR	PNP	25				2	5A	50†	75†	100†
2N2153A	MR	PNP	25				2	5A	50†	75†	100†
2N2154A	MR	PNP	25				2	5A	50†	75†	100†
2N2156A	MR	PNP	25				2	5A	80†	105†	160†
2N2157A	MR	PNP	25				2	5A	80†	105†	160†
2N2158A	MR	PNP	25				2	5A	80†	105†	160†
2N2159	ETC	PNP	25				2	5A	80†		160†
2N2162	SPR CRY	PNP	13				3	1	20	35	
2N2163	SPR CRY	PNP	13				3	1	20	35	
2N2164	SPR CRY	PNP	13				3	1	25	40	
2N2165	SPR CRY	PNP	13				6	1		25	
2N2166	SPR CRY	PNP	13				6	1		25	
2N2167	SPR CRY	PNP	13				6	1		38	
2N2168	SPR	PNP	13				0.5	10	50†	100†	
2N2169	SPR	PNP	13				0.5	10	40†	85†	
2N2170	SPR	PNP	13				0.5	10	20†	70†	
2N2171	MR	NPN	17				1	20	110†		250†
2N2172	KSC	PNP	13				5	1	32	48	
2N2175	SP	PNP	13				4.5	0.1		80†	
2N2176	SP	PNP	13				4.5	0.1		80†	
2N2177	SP	PNP	13				4.5	0.5	70†	95†	
2N2178	SP	PNP	13				4.5	0.5	70†	95†	
2N2185	PCO CRY	PNP	13								
2N2187	PCO CRY	PNP	13								
2N2188	TII	PNP	13				9	1.5	40	90	160
2N2189	TII	PNP	13				9	1.5	60	135	180
2N2190	TII	PNP	13				9	1.5	40	90	160
2N2191	TII	PNP	13				9	1.5	60	135	180
2N2192	GE TH TII	NPN	17								
2N2192A	GE TII TH	NPN	17								
2N2192B	MR RAY	NPN	17								
2N2193	TII GE TH	NPN	17								
2N2193A	GE TII TH	NPN	17								
2N2193B	MR RAY TH	NPN	17								
2N2194	GE TII TH	NPN	17								
2N2194A	GE TII TH	NPN	17								
2N2194B	MR RAY	NPN	17								
2N2195	GE	NPN	17								
2N2195A	GE	NPN	17								
2N2195B	MR RAY	NPN	17								
2N2196	GE TH	NPN	103				30	30	30		
2N2197	TH GE	NPN	103				30	1	30		
2N2201	GE	NPN	103				30	30	30		
2N2202	GE	NPN	121				30	30	30		
2N2203	GE	NPN	17				30	30	30		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			65	3A	62.5W†		2N2146A
			50	5A	12.5W†		2N2147
			40	5A	12.5W†		2N2148
			80	2A	1.0W	Δ With heat sink	2N2150
			80	2A	2.0W	Δ With heat sink	2N2151
			30	30A	170.0W†		2N2152A
			45	30A	170.0W†		2N2153A
			60	30A	170.0W†		2N2154A
			30	30A	170.0W†		2N2156A
			45	30A	170.0W†		2N2157A
			60	30A	170.0W†		2N2158A
			75	30A	170.0W†		2N2159
			30	100	150		2N2162
			15	100	150		2N2163
			8	100	150		2N2164
			30	100	150		2N2165
			15	100	150		2N2166
			8	100	150		2N2167
			15	100	60		2N2168
			15	100	60		2N2169
			15	100	60		2N2170
				400	225		2N2171
				400	200		2N2172
5	20μA	2.5	6	50	100		2N2175
5	20μA	2.5	6	50	100		2N2176
4.5	1	8	6	50	100		2N2177
4.5	1	8	6	50	100		2N2178
			30	50	150		2N2185
			30	50	150		2N2187
			25		125		2N2188
			25		125		2N2189
			25		125		2N2190
			25		125		2N2191
			40	1A	800		2N2192
			40	1A	800		2N2192A
			40	1A	800		2N2192B
			50	1A	800		2N2193
			50	1A	800		2N2193A
			50	1A	800		2N2193B
			40	1A	800		2N2194
			40	1A	800		2N2194A
			40	1A	800		2N2194B
			25	1A	600		2N2195
			25	1A	600		2N2195A
			25	1A	600		2N2195B
			60		2.0W		2N2196
			60		2.0W		2N2197
			100	80	2.0W		2N2201
			100	80	1.0W		2N2202
			100	80	1.0W		2N2203

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N2204	GE	NPN	110				30	30	30		
2N2205	RCA	NPN	17				1	10	20†		
2N2206	RCA	NPN	17				1	10	40†		120†
2N2209	RCA	PNP	17				0.2	24	50†		
2N2210	RCA	PNP	25								
2N2212	BEN	PNP	16				1.0	600	50†		200†
2N2216	NOR	PNP	17								
2N2217	TIF SYL TII MR	NPN	17				10	10	17†		
2N2217/51	SYL	NPN	81				10	10	17†		
2N2218	TIF SYL TII	NPN	17				10	10	35†		
2N2218/51	SYL	NPN	81				10	10	35†		
2N2218A	TIL	NPN	17				10	1	30		150
2N2219	TIF SYL TII	NPN	17				10	10	75†		
2N2219/51	SYL	NPN	81				10	10	75†		
2N2219A	TIL	NPN	17				10	1	50		300
2N2220	TIF TII SYL	NPN	17				10	10	17†		
2N2221	TIF TII MR SYL	NPN	17				10	10	25†		
2N2221A	TIL	NPN	17				10	1	30		150
2N2222	TIF TII MR SYL	NPN	17				10	10	50		
2N2222A	TIL	NPN	17				10	1	50		300
2N2223	AM TII SGS TH	NPN	102				5	1	40		200
2N2223A	AM TII SGS	NPN	102				5	1	40		200
2N2224	NAT	NPN	17				1	100	40†		120†
2N2225	KSC	PNP	13				0.5	100	100†	200†	300†
2N2234	STC	NPN	16	20		2mA	9	20	10		
2N2235	STC	NPN	16	20		5mA	9	20	20		
2N2236	STC	NPN	17				2	100		35†	
2N2237	STC	NPN	17				2	100		65†	
2N2242	NSC NAT	NPN	17				1	10	40†		120†
2N2243	TII GE	NPN	17				10	10	30†		
2N2243A	TII GE	NPN	17				10	10	30†		
2N2244	NAT	NPN	17					100	40†		120†
2N2245	NAT	NPN	17					100	80†		250†
2N2246	NAT	NPN	17					100	150†		450†
2N2247	NAT	NPN	17					100	40†		120†
2N2248	NAT	NPN	17					100	80†		250†
2N2249	NAT	NPN	17					100	150†		450†
2N2250	NAT	NPN	17				1	1	40†		120†
2N2251	NAT	NPN	17					1	80†		250†
2N2252	NAT	NPN	17					1	150†		450†
2N2253	NAT	NPN	17					1	40†		120†
2N2254	NAT	NPN	17					1	80†		250†
2N2255	NAT	NPN	17					1	150†		450†
2N2256	BC MR	NPN	17				1.0	10	17†	30†	
2N2257	BC MR	NPN	17				1.0	10	40†	50†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			100	80	1.0W		2N2204
			20		300		2N2205
			20		300		2N2206
				100	150		2N2209
			100	15A			2N2210
			120	10	60.0W†		2N2212
			100	250	800		2N2216
			30	800	800		2N2217
			30	800	300		2N2217/51
			30	800	800		2N2218
			30	800	300		2N2218/51
			40	800	800		2N2218A
			30	800	800		2N2219
			30	800	300		2N2219/51
10	0.1	4*	40	800	800		2N2219A
			30	800	500		2N2220
			30	800	500		2N2221
			40	800	500		2N2221A
			30	800	500		2N2222
10	0.1	4*	40	800	500		2N2222A
			60	500	500		2N2223
			60	500	500		2N2223A
				500	800		2N2224
			4	400	200		2N2225
			20	500	3.0W		2N2234
			20	500	3.0W		2N2235
			20	500	600		2N2236
			20	500	600		2N2237
							2N2242
			80	1A	800		2N2243
			80	1A	800		2N2243A
				100	500		2N2244
				100	500		2N2245
				100	500		2N2246
				100	500		2N2247
				100	500		2N2248
				100	500		2N2249
				100	500		2N2250
				100	500		2N2251
				100	500		2N2252
				100	500		2N2253
				100	500		2N2254
				10	500		2N2255
				100	300		2N2256
				100	300		2N2257

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		r'_{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
2N2259	MR	PNP	17				1	10	40†	50†	
2N2266	MH	PNP	27				2	500	40†	75†	120†
2N2267	MH	PNP	27				2	500	40†	75†	120†
2N2268	MH	PNP	27				2	500	40†	75†	120†
2N2269	MH	PNP	27				2	500	40†	75†	120†
2N2270	RCA	NPN	17				10	5	30		180
2N2271	SYL	PNP	17				1.5	35	50†		100†
2N2273	RCA	PNP	17				10	1	20†		150†
2N2274	CRY SPR	PNP	17				0.5	5	10†		
2N2275	CRY SPR	PNP	17				0.5	5	10†		
2N2276	CRY SPR	PNP	17				0.5	5	10†		
2N2277	CRY SPR	PNP	17				0.5	5	10†		
2N2278	PCO CRY SPR	PNP	17				0.5	5	10†		
2N2279	PCO CRY SPR	PNP	17				0.5	5	10†		
2N2280	PCO CRY SPR	PNP	17				0.5	5	10†		
2N2281	PCO CRY SPR	PNP	17				0.5	5	10†		
2N2282	SH BEN	PNP	56				1	500	30†		90†
2N2283	SH BEN	PNP	56				1	500	30†		90†
2N2284	SH BEN	PNP	56				1	500	30†		90†
2N2285	BEN	PNP	16				2	10A	35†		140†
2N2286	BEN	PNP	16				2	10A	35†		140†
2N2287	BEN	PNP	16				2	10A	35†		140†
2N2288	BEN	PNP	16				2	5A	20†		60†
2N2289	BEN	PNP	16				2	5A	20†		60†
2N2290	BEN	PNP	16				2	5A	20†		60†
2N2297	FC MULL SYL	NPN	17				5	1	60		
2N2297/51	SYL	NPN	81								
2N2303	TT HA SYL	PNP	17				5	1	60		
2N2304	SIL	NPN	13				4	300	20†		80†
2N2305	SIL TH	NPN	16				4	800	15†		60†
2N2308	SIL	NPN	13				4	1A	20†		60†
2N2309	RAY	NPN	17				4	0.2		50†	
2N2310	RAY	NPN	17				10	200		20†	
2N2311	RAY	NPN	17				10	200		20†	
2N2312	RAY	NPN	17				10	200		60†	
2N2313	RAY	NPN	17				10	200		60†	
2N2314	NAT	NPN	17				10	150	20†		60†
2N2315	NAT	NPN	17				10	150	40†		120†
2N2316	NAT	NPN	17				10	150	40†		120†
2N2317	NAT	NPN	17				10	150	40†		120†
2N2330	MR	NPN	13				1	10	50†		
2N2331	MR	NPN	13				1	10	50†		
2N2332	NAT	PNP	17								
2N2333	NAT	PNP	17								
2N2334	NAT	PNP	17								
2N2335	NAT	PNP	17								
2N2336	NAT	PNP	17								
2N2337	NAT	PNP	17								
2N2338	RCA	NPN	25				4	300	15†		60†
2N2339	RCA	NPN	68				4	300	20†		80†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
10	0.3	6*	5	100	150		2N2259
			55	5A	50.0W†		2N2266
			55	5A	50.0W†		2N2267
			55	5A	50.0W†		2N2268
			55	5A	50.0W†		2N2269
			45	1A	1.0W		2N2270
			15	500	250		2N2271
			15	100	100		2N2273
			25	50	150		2N2274
			25	50	150		2N2275
			10	50	150		2N2276
			10	50	150		2N2277
			15	50	150		2N2278
			15	50	150		2N2279
			6	50	150		2N2280
			6	50	150		2N2281
			30	3A	5.0W		2N2282
			60	3A	5.0W		2N2283
			100	3A	5.0W		2N2284
			30	25A	100.0W†		2N2285
			60	25A	100.0W†		2N2286
			80	25A	100.0W†		2N2287
			40	10A	60.0W†		2N2288
			80	10A	60.0W†		2N2289
			120	10A	60.0W†		2N2290
			35	1A	800		2N2297
			35		300		2N2297/51
			35	600	600		2N2303
			40	3A	25.0W†		2N2304
			40	6A	75.0W†		2N2305
			80	3A	25.0W†		2N2308
			30		600		2N2309
					400		2N2310
					400		2N2311
			60		400		2N2312
					400		2N2313
					400		2N2314
				500	350		2N2315
				500	350		2N2316
				500	350		2N2317
			20		800		2N2330
			20		500		2N2331
					150		2N2332
					150		2N2333
					150		2N2334
					150		2N2335
					150		2N2336
					150		2N2337
			40	7.5A	150.0W†		2N2338
			40	2.5A	40.0W†		2N2339

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N2344	MR	NPN	17					500	20†		60†
2N2350	GE	NPN	17				10	150	100†		300†
2N2350A	GE	NPN	17				10	150	100†		300†
2N2351	GE	NPN	17				10	150	40†		120†
2N2351A	GE	NPN	17				10	150	40†		120†
2N2352	GE	NPN	17				10	150	20†		60†
2N2352A	GE	NPN	17				10	150	20†		60†
2N2353	GE	NPN	17				10	150	20†		
2N2353A	GE	NPN	17				10	150	20†		
2N2356	GE	NPN	113				10	150	20†		
2N2356A	GE	NPN	113								
2N2360	PCO	PNP	9				10	2	10†	33†	
2N2361	PCO	PNP	9				10	2	10†	33†	
2N2362	PCO	PNP	9				10	2	10†	33†	
2N2363	TII	PNP	9				6	2	10		
2N2364	GE	NPN	17				10	150	40†		120†
2N2364A	GE	NPN	17				10	150	40†		120†
2N2368	AM TII FC SC SYL HA	NPN	17								
2N2369	AM TII FC SC SYL HA	NPN	17								
2N2369A	AM SGS SC TIL HA	NPN	17								
2N2370	NAT	PNP	17				4	25 μ A		15†	
2N2371	NAT	PNP	17				4	25 μ A		20†	
2N2372	NAT	PNP	17				4	25 μ A		15†	
2N2373	NAT	PNP	17				4	25 μ A		20†	
2N2374	PCO	PNP	13				12	2	100	210	500
2N2375	PCO	PNP	13				12	2	35	95	200
2N2376	PCO	PNP	13				12	2	35	95	200
2N2380	PCO	NPN	17				5	150	20†	70†	120†
2N2380A	PCO	NPN	17				5	6	60	100	180
2N2381	MR	PNP	17				0.5	200	40†		
2N2382	MR	PNP	17				0.5	200	40†		
2N2383	SIL	NPN	75				4	1.5A	20†		60†
2N2384	SIL	NPN	35				4	1.5A	20†		60†
2N2387	TIL	NPN	81				0.5	1	60		
2N2388	TIL	NPN	81				5	1	150		
2N2389	TII	NPN	81				5	1	30		100
2N2390	TII	NPN	81				5	1	50		200
2N2392	TII	NPN	81				1	10		60†	
2N2393	TII	PNP	81				5	1	15		50
2N2394	TII	PNP	81				5	1	25		100
2N2395	TII	NPN	81								
2N2396	TII	NPN	81								
2N2397	SYL	NPN	81				1	10	25†		120†
2N2398	PCO	PNP	9				10	2	10†	33†	
2N2399	PCO	PNP	9				10	2	10†	33†	
2N2400	PCO	PNP	13				0.5	10	30†	60†	
2N2401	PCO	PNP	13				0.5	10	50†	90†	
2N2402	PCO	PNP	13				0.5	10	60†	170†	
2N2403	NAT	NPN	13				2.5	600	20†		60†
2N2404	NAT	NPN	13				2.5	600	40†		120†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
					400		2N2344
			40	1A	400		2N2350
			50	1A	400		2N2350A
			50	1A	400		2N2351
							2N2351A
			40	1A	400		2N2352
			40	1A	400		2N2352A
			25	1A	350		2N2353
			25	1A	350		2N2353A
			7		300		2N2356
			7		300		2N2356A
			20	50	60		2N2360
			20	50	60		2N2361
			20	50	60		2N2362
			20	50	75		2N2363
			80	1A	400		2N2364
			80	1A	400		2N2364A
			15	500	360		2N2368
			15	500	360		2N2369
			15	200	360		2N2369A
				100	200		2N2370
				100	200		2N2371
				100	150		2N2372
				100	150		2N2373
				500	250		2N2374
				500	250		2N2375
				500	250		2N2376
			40	500	600		2N2380
			40	500	600		2N2380A
					300		2N2381
					300		2N2382
			60	5A	85.0W†		2N2383
			60	5A	85.0W†		2N2384
			45	30	300		2N2387
			45	30	300		2N2388
10	0.3	6	50	500	450		2N2389
10	0.3	5	50	500	450		2N2390
							2N2392
			35	300	450		2N2393
			35	300	450		2N2394
			40	300	450		2N2395
			40	300	450		2N2396
			20	200	300		2N2397
			20	50	60		2N2398
			20	50	60		2N2399
			7		150		2N2400
			10		150		2N2401
			12		150		2N2402
					1.0W		2N2403
					1.0W		2N2404

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N2405	T1 MR RAY	NPN	17								
2N2410	TII SYL NAT SGS	NPN	17								
2N2410/51	SYL	NPN	81								
2N2411	TII	PNP	17				0.5	10	20†		60†
2N2412	TII	PNP	17				0.5	10	40†		120†
2N2413	TII	NPN	17	10	5 μ A	20 μ A	10	10	30†		120†
2N2415	TII	PNP	9				6	2	15	45	
2N2416	TII	PNP	9				6	2	10	30	
2N2427	TT	NPN	13				5	0.1	40		
2N2430	AMP	NPN	13								
2N2432	TII	NPN	17				5	1	50†		
2N2443	FC SGS	NPN	17				5	1	30	62	120
2N2447	RAY	PNP	86				6	1	25		100
2N2448	RAY	PNP	106				6	1	25		100
2N2449	RAY	PNP	111				6	1	50		200
2N2450	RAY	PNP	106				6	1	50		200
2N2452	SGS	NPN	17								
2N2453	AM TII	NPN	102				5	1	150		600
2N2453A	AM	NPN	102				5	1	150		600
2N2455	SYL	PNP	17				0.2	2	20†	52†	100†
2N2456	SYL	PNP	17				0.2	2	20†	52†	100†
2N2459	SP	NPN	17				5	5	40		80
2N2460	SP	NPN	17				5	5	70		130
2N2461	SP	NPN	17				5	5	120		180
2N2462	SP	NPN	17				5	5	170		230
2N2463	SP	NPN	17				5	5	40		80
2N2464	SP	NPN	17				5	5	70		130
2N2465	SP	NPN	17				5	5	120		180
2N2466	SP	NPN	17				5	5	170		230
2N2467	SH BEN	PNP	17				1	500	30†		90†
2N2468	SH BEN	PNP	17				1	500	30†		90†
2N2469	SH BEN	PNP	17				6	1		15	
2N2474	CRY	PNP	17								
2N2475	RCA SYL SGS	NPN	17				0.4	20	30†	50†	150†
2N2475/46	SYL	NPN	17				0.4	20	30†		150†
2N2475/51	SYL	NPN	81				0.4	20	30†		150†
2N2476	SGS RCA	NPN	17				0.4	150	20†		40†
2N2477	RCA FC	NPN	17				0.4	150	40†		
2N2478	PCO	NPN	13				1.5	150	30†		70†
2N2479	PCO	NPN	13				5	6	60		100
2N2480	GE TH	NPN	102				5	1	40	75	
2N2480A	GE TH	NPN	102				5	1	50		300
2N2481	MR SYL	NPN	17				1	1	25†		
2N2482	RCA	NPN	17				6	2	15		175
2N2483	NAT SGS TIL AM SP	NPN	17	5		0.1nA	5	1	80	280	450
2N2484	SGS TIL AM SP	NPN	17	5		0.1nA	5	1	150	400	900
2N2487	SPR	NPN	13				0.5	10	20†		
2N2490	DEL MR	PNP	25				2	5A	20†		40†
2N2491	DEL MR	PNP	25				2	5A	25†		70†
2N2492	DEL MR	PNP	25				2	5A	25†		50†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			90	1A	4W†		2N2405
			30	800	800		2N2410
			30	800	800		2N2410/51
			20	100	300		2N2411
			20	100	300		2N2412
			18	200	300		2N2413
			10	20	75		2N2415
			10	20	75		2N2416
			40	50	500		2N2427
5	0.5	4	32	300	280		2N2430
			30	100	300		2N2432
10	0.3	5	100	100	800		2N2443
2.5	0.5	22*	24	100	75		2N2447
2.5	0.5	22*	24	100	75		2N2448
2.5	0.5	22*	20	100	75		2N2449
2.5	0.5	22*	20	100	75		2N2450
			60		500		2N2452
5	10μA	7*	30		200		2N2453
5	10μA	7*	50	200			2N2453A
			15	200	150		2N2455
			15	200	150		2N2456
			60		400		2N2459
			60		400		2N2460
			60		400		2N2461
			60		400		2N2462
			60				2N2463
			60		500		2N2464
			60		500		2N2465
			60		500		2N2466
			30	3A	5.0W		2N2467
			60	3A	5.0W		2N2468
			100	3A	5.0W		2N2469
			15	50	250		2N2474
			6		300		2N2475
			6		300		2N2475/46
			6		300		2N2475/51
			20		600		2N2476
			20		600		2N2477
			40	500	600		2N2478
			40	500	600		2N2479
10	0.3	8*	40	500	300		2N2480
10	0.3	8*	40	500	300		2N2480A
			15	500	360		2N2481
			12	100	150		2N2482
5	10μA	4*	60	50	360		2N2483
5	10μA	3*	60	50	360		2N2484
				100	60		2N2487
			60	15A	170.0W†		2N2490
			50	15A	170.0W†		2N2491
			70	15A	170.0W†		2N2492

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N2493	DEL	PNP	25				2	5A	25†		50†
2N2495	AMP	PNP	9				6	1		70	
2N2496	AMP	PNP	9				6	1	10	70	
2N2501	BC	NPN	17				1.0	10	50†		150†
2N2509	AM NAT	NPN	17				5	10 μ A	25†		
2N2510	AM	NPN	17				5	10 μ A	75†		
2N2511	AM	NPN	17				5	10 μ A	120†		
2N2515	SP	NPN	17				5	5	40		100
2N2516	SP	NPN	17				5	5	80		200
2N2518	SP	NPN	17				5	5	40		100
2N2519	SP	NPN	17				5	5	80		200
2N2520	SP	NPN	17				5	1	18		90
2N2521	SP	NPN	17				5	1	36		90
2N2522	SP	NPN	17				5	1	76		333
2N2523	SP	NPN	17				5	10 μ A	40†		120†
2N2524	SP	NPN	17				5	1	150		600
2N2526	MR	PNP	16				2	3A	20†		50†
2N2527	MR	PNP	16				2	3A	20†		50†
2N2528	MR	PNP	16				2	3A	20†		50†
2N2529	TII	NPN	17				5	1	12	16	22
2N2530	TII	NPN	17				5	1	18	28	42
2N2531	TII	NPN	17				5	1	36	46	90
2N2532	TII	NPN	17				5	1	76	100	225
2N2533	TII	NPN	17				20	1	19	55	120
2N2534	TII	NPN	17				20	1	39	100	250
2N2537	TII	NPN	17				10	10	30†		
2N2538	TII	NPN	17				10	10	50†		
2N2539	TII	NPN	17				10	10	30†		
2N2540	TII	NPN	17				10	10	50†		
2N2552	TII	PNP	73	15			25mA	0.5	1A	20†	33† 60†
2N2553	TII	PNP	73	20			20mA	0.5	1A	20†	33† 60†
2N2554	TII	PNP	73	25			20mA	0.5	1A	20†	33† 60†
2N2555	TII	PNP	73	30			20mA	0.5	1A	20†	33† 60†
2N2556	TII	PNP	73	15			25mA	0.5	1A	20†	33† 60†
2N2557	TII	PNP	73	20			20mA	0.5	1A	20†	33† 60†
2N2558	TII	PNP	73	25			20mA	0.5	1A	20†	33† 60†
2N2559	TII	PNP	73	30			20mA	0.5	1A	20†	33† 60†
2N2560	TII	PNP	73	15			25mA	1.5	500	25	100
2N2561	TII	PNP	73	20			20mA	1.5	500	25	100
2N2562	TII	PNP	73	20			20mA	1.5	500	25	100
2N2563	TII	PNP	73	30			20mA	1.5	500	25	100
2N2564	TII	PNP	17	15			25mA	1.5	500	25	100
2N2565	TII	PNP	17	20			20mA	1.5	500	25	100
2N2566	TII	PNP	17	20			20mA	1.5	500	25	100
2N2567	TII	PNP	17	30			20mA	1.5	500	25	100
2N2569	ME AMP	NPN	17				10	0.1	50†	100†	
2N2570	ME AMP	NPN	17				10	0.1	50†	100†	
2N2586	TII	NPN	17				5	1	150	375	600
2N2590	SP	PNP	17				5	5	40		80
2N2591	SP	PNP	17				5	5	70		135

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
			85	15A	170.0W†		2N2493
				10	100		2N2495
				10	100		2N2496
			20		360		2N2501
5	10μA	7*	80		360		2N2509
5	10μA	4*	65		360		2N2510
5	10μA	4*	50		360		2N2511
			60		400		2N2515
			60		400		2N2516
			80		400		2N2518
			80		400		2N2519
			60		400		2N2520
			60		400		2N2521
			60		400		2N2522
			45		400		2N2523
			45		400		2N2524
			80	10A	85.0W†		2N2526
			120	10A	85.0W†		2N2527
			160	10A	85.0W†		2N2528
5	1	20	40	25	150		2N2529
5	1	20	40	25	150		2N2530
5	1	20	40	25	150		2N2531
			40	25	150		2N2532
			40	25	150		2N2533
			40	25	150		2N2534
			30	800	500		2N2537
			30	800	500		2N2538
			30	800	500		2N2539
			30	800	500		2N2540
			40	3A	800		2N2552
			60	3A	800		2N2553
			80	3A	800		2N2554
			00	3A	800		2N2555
			40	3A	800		2N2556
			60	3A	800		2N2557
			80	3A	800		2N2558
			100	3A	1.0W		2N2559
			40	3A	900		2N2560
			60	3A	900		2N2561
			80	3A	900		2N2562
			100	3A	900		2B2563
			40	3A	400		2N2564
			60	3A	400		2N2565
			80	3A	400		2N2566
			100	3A	400		2N2567
			15		300		2N2569
			15		300		2N2570
5	1	1.5	45	30	300		2N2586
			60		400		2N2590
			60		300		2N2591

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N2592	SP	PNP	17				5	5	115		200
2N2593	SP	PNP	17				5	5	160		275
2N2594	RCA TT	NPN	17								
2N2595	SP	PNP	17				5	5	20		50
2N2596	SP	PNP	17				5	5	40		100
2N2597	SP	PNP	17				5	5	80		200
2N2598	SP	PNP	17				5	5	20		50
2N2599	SP	PNP	17				5	5	40		100
2N2599A	SP	PNP	17				5	5	40		100
2N2600	SP	PNP	17				5	5	80		200
2N2600A	SP	PNP	17				5	5	80		200
2N2601	SP	PNP	17				5	1	18		90
2N2602	SP	PNP	17				5	1	36		90
2N2603	SP	PNP	17				5	1	76		333
2N2604	TII SP	PNP	17				5	1	60	50	
2N2605	TII SP	PNP	17				5	1	150		600
2N2605A	SP	PNP	17				5	1	200		600
2N2611	GE	NPN	103				30	30	12		
2N2613	RCA	PNP	13				4	0.5	60	125	
2N2614	RCA	PNP	13				12	1	100	160	
2N2616	SGS	NPN	17				1	3	20†	50†	
2N2618	SYL	NPN	17				10	1	30		150
2N2618/46	SYL	NPN	17				10	1	30		150
2N2630	MR	PNP	17				0.75	100	25†		
2N2631	TII	NPN	17				28	200	8†		
2N2635	MR TII	PNP	17				1	5	45†		300†
2N2636	BEN	PNP	16								
2N2637	BEN	PNP	16								
2N2638	BEN	PNP	16								
2N2639	TII SP	NPN	102	5		10nA	5	1	65		600
2N2640	TII SP	NPN	102	5		10nA	5	1	65		600
2N2641	TII SP	NPN	102	5		10nA	5	1	65		600
2N2642	TII SP	NPN	102	5		10nA	5	1	130	250	600
2N2643	TII SP	NPN	102	5		10nA	5	1	130	250	600
2N2644	TII SP	NPN	102	5		10nA	5	1	130	250	600
2N2645	FC	NPN	17				5	1	75	110	
2N2649	NAT	NPN	17				10	500	10†		
2N2650	NAT	NPN	17				10	500	10†		
2N2651	PCO	NPN	17				1	10	25†	50†	
2N2652	GE	NPN	102				5	1	50		300
2N2652A	GE	NPN	102				5	1	50		300
2N2657	SSP BEN NAT SIL	NPN	17								
2N2658	SSP BEN NAT SIL	NPN	17	60	10 μ A	50 μ A					
2N2659	TII	PNP	13	15		20mA	3	100	30		120
2N2660	TII	PNP	13	20		20mA	3	100	30		120
2N2661	TII	PNP	13	25		20mA	3	100	30		120
2N2662	TII	PNP	73	15		20mA	3	100	30		120
2N2663	TII	PNP	73	20		20mA	3	100	30		120
2N2664	TII	PNP	73	25		20mA	3	100	30		120
2N2665	TII	PNP	17	15		20mA	3	100	50		200

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			60		300		2N2592
			60		300		2N2593
			45		400		2N2594
			60		400		2N2595
			60		400		2N2596
			60		400		2N2597
			80				2N2598
			80		400		2N2599
			100		400		2N2599A
			80		400		2N2600
			100		400		2N2600A
			60		400		2N2601
			60		400		2N2602
			60		400		2N2603
5	10μA	4*	45	30	400		2N2604
5	10μA	3*	45	30	400		2N2605
5	10μA	3*	45		400		2N2605
			100	75	2.0W		2N2611
4	0.5	5*	10	10	100		2N2613
			15	50	100		2N2614
			15	50	300		2N2616
			40	750	600		2N2618
			40	750	400		2N2618/46
			18	100	300		2N2630
			60	1.5A	8.7W		2N2631
			15	100	150		2N2635
			40	25A	100.0W†		2N2636
			60	25A	100.0W†		2N2637
			80	25A	100.0W†		2N2638
5	10μA	1.8	45	30	300		2N2639
5	10μA	1.8	45	30	300		2N2640
5	10μA	1.8	45	30	300		2N2641
5	10μA	1.8	45	30	300		2N2642
5	10μA	1.8	45	30	300		2N2643
5	10μA	1.8	45	30	300		2N2644
			50		500		2N2645
					8.7W		2N2649
					8.7W		2N2650
10	0.3	8*	20	500	360		2N2651
			60	500	300		2N2652
10	0.3	8*	60	500	300		2N2652A
			60	500	1.2W		2N2657
			80	500	1.2W		2N2658
			50	3A	15.0W†		2N2659
			70	3A	15.0W†		2N2660
			90	3A	15.0W†		2N2661
			50	3A	15.0W†		2N2662
			70	3A	15.0W†		2N2663
			90	3A	15.0W†		2N2664
			50	3A	15.0W†		2N2665

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{CO}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_C mA	MIN	TYP	MAX
2N2666	TII	PNP	17	20		20mA	3	100	50		200
2N2667	TII	PNP	17	25		20mA	3	100	50		200
2N2668	TII	PNP	73	15		20mA	3	100	50		200
2N2669	TII	PNP	73	20		20mA	3	100	50		200
2N2670	TII	PNP	73	25		20mA	3	100	50		200
2N2673	GE	NPN	17				5	1	9		22
2N2674	GE	NPN	17				5	1	18		44
2N2675	GE	NPN	17				5	1	37		90
2N2676	GE	NPN	17				5	1	76		333
2N2677	GE	NPN	17				20	1	19		120
2N2678	GE	NPN	17				20	1	39		250
2N2692	TII	NPN	17				1	0.1	90†	150†	360†
2N2693	TII	NPN	17				1	0.1	60†		
2N2694	TII	NPN	17				1	0.1	30†		
2N2695	SGS TII TIL	PNP	17				10	10	25	74	180
2N2696	SGS TII TIL	PNP	17				10	10	25	74	180
2N2708	RAY	NPN	17				2	2		200†	
2N2710	PCO	NPN	17				1	10	40†	65†	
2N2711	GE	NPN	116				4.5	2	30†		90†
2N2712	GE	NPN	116				4.5	2	75†		225†
2N2713	GE TH	NPN	116				4.5	2	30†		90†
2N2714	GE TH	NPN	116				4.5	2	75†		225†
2N2715	GE	NPN	116								
2N2716	GE	NPN	116				4.5	2	75†		225†
2N2720	AM SP	NPN	102				5	1	35†		
2N2721	AM SP	NPN	102				5	1	35†		
2N2722	SP	NPN	102				5	0.1	125†		
2N2723	SP SPR	NPN	100								
2N2724	SP SPR	NPN	100								
2N2725	SP SPR	NPN	100								
2N2726	GE	NPN	17								
2N2727	GE	NPN	17								
2N2729	SGS	NPN	13				1	3	20	50	
2N2732	MH SOL	PNP	25								
2N2735	MH SOL	PNP	118								
2N2738	MH SOL	PNP	117								
2N2739	WES	NPN	67				12	5A		14	
2N2740	WES	NPN	67				12	5A		14	
2N2741	WES	NPN	67				12	5A		14	
2N2742	WES	NPN	67				12	5A		14	
2N2745	WES	NPN	67				12	10A		11	
2N2746	WES	NPN	67				12	10A		11	
2N2747	WES	NPN	67				12	10A		11	
2N2748	WES	NPN	67				12	10A		11	
2N2751	WES	NPN	67				12	10A		14	
2N2752	WES	NPN	67				12	10A		14	
2N2753	WES	NPN	67				12	10A		14	
2N2754	WES	NPN	67				12	10A		14	
2N2757	WES	NPN	35				12	10A		7	
2N2758	WES	NPN	35				12	10A		7	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			70	3A	15.0W†		2N2666
			90	3A	15.0W†		2N2667
			50	3A	15.0W†		2N2668
			70	3A	15.0W†		2N2669
			90	3A	15.0W†		2N2670
5	1	11	45	25	250		2N2673
5	1	11	45	25	250		2N2674
5	1	11	45	25	250		2N2675
5	1	11	45	25	250		2N2676
5	1	10	35	25	250		2N2677
5	1	10	35	25	250		2N2678
			30	50	300		2N2692
			30	50	300		2N2693
			20	50	300		2N2694
			25	500	360		2N2695
			25	50C	360		2N2696
			20		200		2N2708
			20	500	360		2N2710
5	0.1	2.8	18	100	200		2N2711
5	0.1	2.8	18	100	200		2N2712
			18	200	200		2N2713
			18	200	200		2N2714
5	0.1	2.8	18	25	200		2N2715
5	0.1	2.8	18	25	200		2N2716
			60	40	300		2N2720
			60	40	300		2N2721
			45	40	300		2N2722
			60	40	500		2N2723
			60	40	500		2N2724
			45	30	500		2N2725
			200		1.0W		2N2726
			200		1.0W		2N2727
			15	50	30C		2N2729
			30	65A			2N2732
			30	65A			2N2735
			30	65A			2N2738
			50	20A	200.0W†		2N2739
			100	20A	200.0W†		2N2740
			150	20A	200.0W†		2N2741
			200	20A	200.0W†		2N2742
			50	20A	200.0W†		2N2745
			100	20A	200.0W†		2N2746
			150	20A	200.0W†		2N2747
			200	20A	200.0W†		2N2748
			50	20A	200.0W†		2N2751
			100	20A	200.0W†		2N2752
			150	20A	200.0W†		2N2753
			200	20A	200.0W†		2N2754
			50	30A	200.0W†		2N2757
			100	30A	200.0W†		2N2758

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2N2759	WES	NPN	35				12	10A		7	
2N2760	WES	NPN	35				12	10A		7	
2N2761	WES	NPN	35				12	10A		7	
2N2763	WES	NPN	35				12	10A		11	
2N2764	WES	NPN	35				12	10A		11	
2N2765	WES	NPN	35				12	10A		11	
2N2766	WES	NPN	35				12	10A		11	
2N2769	WES	NPN	35				12	10A		14	
2N2770	WES	NPN	35				12	10A		14	
2N2771	WES	NPN	35				12	10A		14	
2N2772	WES	NPN	35				12	10A		14	
2N2784	SYL	NPN	17				0.5	10	40†		120†
2N2784/46	SYL	NPN	17				0.5	10	40†		120†
2N2784/51	SYL	NPN	81				0.5	10	40†		120†
2N2785	GE	NPN	100								
2N2787	NSC	NPN	17				10	150	20†		60†
2N2788	NSC	NPN	17				10	150	40†		120†
2N2789	NSC	NPN	17				10	150	100†		300†
2N2790	NSC	NPN	17				10	150	20†		60†
2N2791	NSC	NPN	17				10	150	40†	120†	
2N2792	NSC	NPN	17				10	150	100†		300†
2N2800	RAY	NPN	17				10	150	30†		
2N2801	RAY	NPN	17				10	150	75†		
2N2802	TII TIL	PNP	102				5	1	20		200
2N2803	TII TIL	PNP	102				5	1	20		200
2N2804	TII TIL	PNP	102				5	1	20		200
2N2805	TII TIL	PNP	102				5	1	40		200
2N2806	TII TIL	PNP	102				5	1	40		200
2N2807	TII TIL	PNP	102				5	1	40		200
2N2808	RAY	NPN	17				1	2	20		
2N2808A	RAY	NPN	17				1	2	20		
2N2809	RAY	NPN	17				6	2	20		
2N2815	SIL	NPN	35				3	10A	10†		50†
2N2816	SIL	NPN	35				3	10A	10†		50†
2N2817	SIL	NPN	35				3	10A	10†		50†
2N2818	SIL	NPN	35				3	10A	10†		50†
2N2819	SIL	NPN	35				3	15A	10†		50†
2N2820	SIL	NPN	35				3	15A	10†		50†
2N2821	SIL	NPN	35				3	15A	10†		50†
2N2822	SIL	NPN	35				3	15A	10†		50†
2N2823	SIL	NPN	35				3	20A	10†		40†
2N2824	SIL	NPN	35				3	20A	10†		40†
2N2825	SIL	NPN	35				3	20A	10†		40†
2N2828	SIL	NPN	73				4	500	20†		60†
2N2829	SIL	NPN	73				4	1A	20†		60†
2N2832	MR	PNP	16				2	1A	50†	75†	
2N2833	MR	PNP	16				2	1A	50†	75†	
2N2834	MR	PNP	16				2	1A	50†	75†	
2N2837	RAY	NPN	17				10	150	75†		
2N2838	RAY	NPN	17				10	150	30†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			150	30A	200.0W†		2N2759
			200	30A	200.0W†		2N2760
			250	30A	200.0W†		2N2761
			50	30A	200.0W†		2N2763
			100	30A	200.0W†		2N2764
			150	30A	200.0W†		2N2765
			200	30A	200.0W†		2N2766
			50	30A	200.0W†		2N2769
			100	30A	200.0W†		2N2770
			150	30A	200.0W†		2N2771
			200	30A	200.0W†		2N2772
			6		300		2N2784
			6		300		2N2784/46
			6		300		2N2784/51
			60		500		2N2785
			70		800		2N2787
			70		800		2N1788
			70		800		2N2789
			35		500		2N2790
			35		500		2N2791
			35		500		2N2792
			35	800	800		2N2800
			35		800		2N2801
5	10μA	2	20	30	250		2N2802
5	10μA	2	20	30	250		2N2803
5	10μA	2	30	20	250		2N2804
5	10μA	2	20	30	250		2N2805
5	10μA	2	20	30	250		2N2806
5	10μA	2	20	30	250		2N2807
			10		200		2N2808
			10		200		2N2808A
			80	20A	200.0W†		2N2809
			10	20A	200.0W†		2N2815
			150	20A	200.0W†		2N2816
							2N2817
			150	20A	200.0W†		2N2818
			80	25A	200.0W†		2N2819
			10	25A	200.0W†		2N2820
			150	25A	200.0W†		2N2821
			200	25A	200.0W†		2N2822
			80	30A	200.0W†		2N2823
			100	30A	200.0W†		2N2824
			150	30A	200.0W†		2N2825
			60	3A	40.0W†		2N2828
			60	3A	40.0W†		2N2829
			50	20A	85.0W†		2N2832
			75	20A	85.0W†		2N2833
			100	20A	85.0W†		2N2834
			35		500		2N2837
			35		500		2N2838

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I'co			β				
		TYPE	No.	Vce	TYP μ A	MAX μ A	Vce	Ic mA	MIN	TYP	MAX
2N2845	SGS FC	NPN	17				10	150	30†		
2N2846	SGS FC	NPN	17				10	150	30†		
2N2847	SGS	NPN	17				10	150	40†		
2N2848	SGS	NPN	17				10	150	40†		
2N2849	SSP	NPN	17				1	50	50†	90†	
2N2849-1	SSP	NPN	17				1	50	50†	90†	
2N2849-2	SSP	NPN	73				1	50	50†	90†	
2N2849-3	SSP	NPN	73				1	50	50†	90†	
2N2850	SSP	NPN	17				1	50	25†	50†	
2N2850-1	SSP	NPN	17				1	50	25†	50†	
2N2850-2	SSP	NPN	73				1	50	25†	50†	
2N2850-3	SSP	NPN	73				1	50	25†	50†	
2N2851	SSP	NPN	17				1	50	25†	50†	
2N2851-1	SSP	NPN	17				1	50	25†	50†	
2N2851-2	SSP	NPN	73				1	50	25†	50†	
2N2851-3	SSP	NPN	73				1	50	25†	50†	
2N2852	SSP	NPN	17				1	50	15†	25†	
2N2852-1	SSP	NPN	17				1	50	15†	25†	
2N2852-2	SSP	NPN	73				1	50	15†	25†	
2N2852-3	SSP	NPN	73				1	50	15†	25†	
2N2853	SSP	NPN	17								
2N2853-1	SSP	NPN	17								
2N2853-2	SSP	NPN	73								
2N2853-3	SSP	NPN	73								
2N2854	SSP	NPN	17				1	50	50†	90†	
2N2854-1	SSP	NPN	17				1	50	50†	90†	
2N2854-2	SSP	NPN	73				1	50	50†	90†	
2N2854-3	SSP	NPN	73				1	50	50†	90†	
2N2855	SSP	NPN	17				1	50	25†	50†	
2N2855-1	SSP	NPN	17				1	50	25†	50†	
2N2855-2	SSP	NPN	73				1	50	25†	50†	
2N2855-3	SSP	NPN	73				1	50	25†	50†	
2N2856	SSP	NPN	17				1	50	15†	25†	
2N2856-1	SSP	NPN	17				1	50	15†	25†	
2N2856-2	SSP	NPN	73				1	50	15†	25†	
2N2856-3	SSP	NPN	73				1	50	15†	25†	
2N2857	RCA	NPN	9				6	2	50		220
2N2858	SIL	NPN	17				3	1A	20†		60†
2N2859	SIL	NPN	17				3	1A	20†		60†
2N2860	SYL	PNP	17				0.4	40	40†		
2N2861	TII	PNP	17				5	1	50	75	180
2N2862	TII	PNP	17				5	1	25	50	180
2N2863	TII	NPN	17				15	10	20†		
2N2864	TII	NPN	17				15	10	12†		
2N2865	TII	NPN	9				10	4	20		200
2N2866	TII TT	NPN	99				5	500	20†		60†
2N2867	TII TT	NPN	99				5	500	40†		120†
2N2868	GE	NPN	17				10	150	40†		120†
2N2869	RCA	PNP	16				2	1A	50†	90†	165†
2N2870	RCA	PNP	16				2	1A	50†	90†	165†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			30		360		2N2845
			30		800		2N2846
			20		360		2N2847
			20		800		2N2848
			80	3A	850		2N2849
			80	3A	850		2N2849-1
			80	3A	850		2N2849-2
			80	3A	850		2N2849-3
			80	3A	850		2N2850
			80	3A	850		2N2850-1
			80	3A	850		2N2850-2
			80	3A	850		2N2850-3
			80	3A	850		2N2851
			80	3A	850		2N2851-1
			80	3A	850		2N2851-2
			80	3A	850		2N2851-3
			80	3A	850		2N2852
			80	3A	850		2N2852-1
			80	3A	850		2N2852-2
			80	3A	850		2N2852-3
			40	3A	850		2N2853
			40	3A	850		2N2853-1
			40	3A	850		2N2853-2
			40	3A	850		2N2853-3
			40	3A	850		2N2854
			40	3A	850		2N2854-1
			40	3A	850		2N2854-2
			40	3A	850		2N2854-3
			40	3A	850		2N2855
			40	3A	850		2N2855-1
			40	3A	850		2N2855-2
			40	3A	850		2N2855-3
			40	3A	850		2N2856
			40	3A	850		2N2856-1
			40	3A	850		2N2856-2
			40	3A	850		2N2856-3
			15	20	200		2N2857
			80	3A	8.7W†		2N2858
			100	3A	8.7W†		2N2859
			150		150		2N2860
5	10μA	1.2	20	100	300		2N2861
5	10μA	1.6	20	100	300		2N2862
			25	1A	800		2N2863
			25	1A	800		2N2864
			13	50	200		2N2865
			80		10.0W†		2N2866
			80		10.0W†		2N2867
			40	1A	800		2N2868
				10A	30.0W†		2N2869
				10A	30.0W†		2N2870

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N2873	RCA	PNP	9				6	1	40†		
2N2875	TII TT	PNP	99				10	500	20†	60†	
2N2876	RCA	NPN	73				1	2.5A	5†		
2N2881	SIL CRY	PNP	17	30	65 μ A	100 μ A	4	500	10	45	60
2N2881/P	SIL	PNP	17	30	65 μ A	100 μ A	4	500	10	45	60
2N2881/S	SIL	PNP	17	30	65 μ A	100 μ A	4	500	10	45	60
2N2882	SIL CRY	PNP	17	50	65 μ A	100 μ A	4	500	10	45	60
2N2882/P	SIL	PNP	17	50	65 μ A	100 μ A	4	500	10	45	60
2N2882/S	SIL	PNP	17	50	65 μ A	100 μ A	4	500	10	45	60
2N2883	SGS TII	NPN	17								
2N2884	SGS TII	NPN	17								
2N2885	TII TT	NPN	81				1	0.5	15†		
2N2887	NAT	NPN	35								
2N2890	FC SSP	NPN	17	60	1 μ A	50 μ A	10	50	50	90	
2N2891	FC SSP	NPN	17	60	1 μ A	50 μ A	10	50	50	90	
2N2892	FC SSP	NPN	35	60	1 μ A	50 μ A	10	50	30	65	
2N2893	FC SSP	NPN	35	60	1 μ A	50 μ A	10	50	30	65	
2N2894	SGS FC TII	PNP	17								
2N2895	RCA	NPN	17				5	5	50		
2N2896	RCA	NPN	17				5	5	50		
2N2897	RCA	NPN	17				5	5	50		
2N2898	RCA	NPN	17				5	5	50		
2N2899	RCA	NPN	17				5	5	50		
2N2900	RCA	NPN	17				5	5	50		
2N2901	GIC	NPN	113								
2N2903	AM	NPN	102				5	1	150		600
2N2903A	AM	NPN	102				5	1	150		600
2N2904	TII SP	PNP	17				10	1	25†		
2N2904A	TII SP	PNP	17				10	1	40†		
2N2905	TII SP	PNP	17				10	1	35†		
2N2905A	TII SP	PNP	17				10	1	100†		
2N2906	TII SP	PNP	17				10	1	25†		
2N2906A	TII SP	PNP	17				10	1	40†		
2N2907	TII	PNP	17				10	1	35†		
2N2907A	TII	PNP	17				10	1	100†		
2N2909	GE	NPN	17				10	150	40†		120†
2N2911	SIL	NPN	17				3	1A	20†		60†
2N2912	MR	PNP	13				2	10A	75†		
2N2913	SGS SP AM	NPN	102	5		2nA	5	1	150†		
2N2914	SGS SP AM	NPN	102	5		2nA	5	1	300†		
2N2915	SGS SP AM	NPN	102	5		2nA	5	1	150†		
2N2916	SGS SP AM	NPN	102	5		2nA	5	1	300†		
2N2917	SGS SP AM	NPN	102	5		2nA	5	1	150†		
2N2918	SGS SP AM	NPN	102	5		2nA	5	1	300†		
2N2919	SGS SP AM	NPN	102	5		2nA	5	1	150†		
2N2920	SGS SP AM	NPN	102	5		2nA	5	1	300†		
2N2921	TH	NPN	116				10	2	35		70
2N2922	TH	NPN	116				10	2	55		110
2N2923	GE TH	NPN	116				10	2	90		180
2N2924	GE TH	NPN	116				10	2	150		300

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
					150		2N2873
			50		40.0W†		2N2875
			60	2.5A	17.5W†		2N2876
			60	2A	8.7W†		2N2881
			60	2A	8.7W†		2N2881/P
			60	2A	8.7W†		2N2881/S
			100	2A	8.7W†		2N2882
			100	2A	8.7W†		2N2882/P
			100	2A	8.7W†		2N2882/S
			20	300	800		2N2883
			20	300	800		2N2884
			15		150		2N2885
					25.0W†		2N2887
			80	3A	800		2N2890
			800	3A	800		2N2891
			80	3A	30.0W†		2N2892
			80	3A	30.0W†		2N2893
			12	200	360		2N2894
			65	1A	500		2N2895
			90	1A	500		2N2896
			45	1A	500		2N2897
			65	1A	500		2N2898
			90	1A	500		2N2899
			45	1A	500		2N2900
5	10μA	7*	30		200		2N2901
5	10μA	7*	30		200		2N2903
							2N2903A
			40	600	600		2N2904
			60	600	600		2N2904A
			40	600	600		2N2905
			60	600	600		2N2905A
			40	600	400		2N2906
			60	600	400		2N2906A
			40	600	400		2N2907
			60	600	400		2N2907A
			40	1A	400		2N2909
			125	3A	8.7W†		2N2911
			6	25A	75.0W†		2N2912
5	10μA	4*	45	30	300		2N2913
5	10μA	3*	45	30	300		2N2914
5	10μA	4*	45	30	300		2N2915
5	10μA	3*	45	30	300		2N2916
5	10μA	4*	45	30	300		2N2917
5	10μA	3*	45	30	300		2N2918
5	10μA	4*	60	30	300		2N2919
5	10μA	3*	60		300		2N2920
5	0.1	2.8	25	100	200		2N2921
5	0.1	2.8	25	100	200		2N2922
5	0.1	2.8	25	100	200		2N2923
5	0.1	2.8	25	100	200		2N2924

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N2925	GE TH	NPN	116				10	2	235		470
2N2926	GE	NPN	116				10	2	35		470
2N2926(B)	GE	NPN	116				10	2	35		70
2N2926(G)	GE	NPN	116				10	2	235		470
2N2926(O)	GE	NPN	116				10	2	90		180
2N2926(R)	GE	NPN	116				10	2	55		110
2N2926(Y)	GE	NPN	116				10	2	150		300
2N2927	SGS	PNP	17				10	10	25	74	180
2N2929	MR	PNP	17				10	10	10	35	120
2N2931	TII	NPN	13				5	1	36	46	9C
2N2938	RCA	NPN	17				0.35	10	25†	125†	
2N2944	TII TIF CRY	PNP	17				0.5	1	80†	200†	450†
2N2945	TII TIF CRY	PNP	17				0.5	1	40†	100†	250†
2N2946	TII TIF CRY	PNP	17				0.5	1	30†	70†	150†
2N2947	MR	NPN	16				2	400	2.5†		100†
2N2948	MR	NPN	16				2	400	2.5†		100†
2N2949	MR	NPN	13				2	40	5†		100†
2N2950	MR	NPN	73				2	40	5†		100†
2N2951	TH MR	NPN	17				10	10	20†		150†
2N2952	MR	NPN	17				10	10	20†		150†
2N2953	RCA	PNP	14				10	10	200†	350†	
2N2955	MR SYL	PNP	17				1	50	20†	43†	60†
2N2956	MR SYL	PNP	17				1	50	40†	76†	120†
2N2957	MR SYL	PNP	17				1	50	100†	130†	
2N2958	MR	NPN	17				10	150	40†		120†
2N2959	MR	NPN	17				10	150	100†		300†
2N2972	SGS AM	NPN	102	5		2nA	5	1	150†		
2N2973	SGS AM	NPN	102	5		2nA	5	1	300†		
2N2974	SGS AM	NPN	102	5		2nA	5	1	150†		
2N2975	SGS AM	NPN	102	5		2nA	5	1	300†		
2N2976	SGS AM	NPN	102	5		2nA	5	1	150†		
2N2977	SGS AM	NPN	102	5		2nA	5	1	300†		
2N2978	SGS AM	NPN	102	5		2nA	5	1	150†		
2N2979	SGS AM	NPN	102	5		2nA	5	1	300†		
2N2983	TII	NPN	17	80		50 μ A	30	100	20		80
2N2984	TII	NPN	17	120		50 μ A	30	100	20		80
2N2985	TII	NPN	17	80		50 μ A	30	100	40		160
2N2986	TII	NPN	17	120		50 μ A	30	100	40		160
2N2987	TII	NPN	17	50		100nA	30	100	25		85
2N2988	TII	NPN	17	90		100nA	10	100	25		85
2N2989	TII	NPN	17	90		100nA	10	100	50		170
2N2990	TII	NPN	17	90		100nA	10	100	50		170
2N2991	TII	NPN	73	50		100nA	10	100	25		85
2N2992	TII	NPN	73	90		100nA	10	100	25		85
2N2993	TII	NPN	73	50		100nA	10	100	50		170
2N2994	TII	NPN	73	90		100nA	10	100	50		170
2N2995	GE	NPN	17				10	200	50	30†	170
2N2996	TII	PNP	9				6	4	35		90†
2N2997	TII	PNP	9				12	4	50		
2N2998	TII	PNP	9				6	3	20		500

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	0.1	1.8	25	100	200		2N2925
5	0.1	1.8	18	100	200		2N2926
5	0.1	2.8	18	100	200		2N2926 (B)
5	0.1	2.8	18	100	200		2N2926 (G)
5	0.1	1.8	18	100	200		2N2926 (O)
5	0.1	1.8	18	100	200		2N2926 (R)
5	0.1	1.8	18	100	200		2N2926 (Y)
			25	500	800		2N2927
			10	100	300		2N2929
			5	50	50		2N2931
			13	500	300		2N2938
			10	100	400		2N2944
			20	100	400		2N2945
			35	100	400		2N2946
			60	1.5A	25.0W†		2N2947
			40	1.5A	25.0W†		2N2948
			60	700	500		2N2949
			60	700	700		2N2950
			60	250	800		2N2951
			60	250	500		2N2952
				150	120		2N2953
			25	100	150		2N2955
			20	100	150		2N2956
			18	100	150		2N2957
			20	600	600		2N2958
			20	600	600		2N2959
5	10μA	4*	45	30	300		2N2972
5	10μA	3*	45	30	300		2N2973
5	10μA	4*	45	30	300		2N2974
5	10μA	3*	45	30	300		2N2975
5	10μA	4*	45	30	300		2N2976
5	10μA	3*	45	30	300		2N2977
5	10μA	4*	60	30	300		2N2978
5	10μA	3*	60	30	250		2N2979
			80	3A	1.0W		2N2983
			120	3A	1.0W		2N2984
			80	3A	1.0W		2N2985
			120	3A	1.0W		2N2986
			80	1A	1.0W		2N2987
			100	1A	1.0W		2N2988
			80	1A	1.0W		2N2989
			100	1A	1.0W		2N2990
			80	1A	2.0W		2N2991
			100	1A	2.0W		2N2992
			80	1A	2.0W		2N2993
			100	1A	2.0W		2N2994
					1.5W		2N2995
			10	50	75		2N2996
			15	50	75		2N2997
			12	20	75		2N2998

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N2959	TII	PNP	9				6	3	15		
2N3009	TII	NPN	17								
2N3010	TII TIL	NPN	17								
2N3011	TII TIL	NPN	17								
2N3012	TIF TII	PNP	17								
2N3013	TII SGS	NPN	17								
2N3014	TII SGS	NPN	17								
2N3015	TII	NPN	17								
2N3019	RAY	NPN	17				5	1	80		
2N3020	RAY	NPN	17				5	1	30		
2N3021	MR	PNP	16				2	1A	20†		60†
2N3022	MR	PNP	16				2	1A	20†		60†
2N3023	MR	PNP	16				2	1A	10†		60†
2N3024	MR	PNP	16				2	1A	50†		180†
2N3025	MR	PNP	16				2	1A	50†		180†
2N3026	MR	PNP	16				2	1A	50†		180†
2N3033	TII	NPN	17								
2N3034	TII	NPN	17								
2N3035	TII	NPN	17								
2N3036	TIL TII	NPN	17				10	10	40		180
2N3037	TII	NPN	81				10	10	30		140
2N3038	TII	NPN	81				10	10	60		300
2N3039	TII	PNP	81				10	10	20		120
2N3040	TII	PNP	81				10	10	40		240
2N3043	TII	NPN	127				5	1	130		600
2N3044	TII	NPN	127				5	1	130		600
2N3045	TII	NPN	127				5	1	130		600
2N3046	TII	NPN	127				5	1	65		400
2N3047	TII	NPN	127				5	1	65		400
2N3048	TII	NPN	127				5	1	65		400
2N3049	TII	PNP	127				5	1	30		130
2N3050	TII	PNP	127				5	1	30		130
2N3051	TII	PNP	127				5	1	30		130
2N3052	TII	NPN	127				1	10	25†		130†
2N3053	FER RCA TT	NPN	17				10	150	50†		250†
2N3054	RCA SIL	NPN	16				4	500	25†		100†
2N3055	SIL RCA BEN MR NAT	PNP	16				4	4A	20†		70†
2N3058	CRY NAT RAY SPR	PNP	17				0.5	0.1 μ A	40		120
2N3059	CRY	PNP	17				3	10 μ A	100	170	300
2N3060	CRY	PNP	17				6	1	30†	65†	90†
2N3061	CRY	PNP	17				6	1	60†	120†	180†
2N3062	CRY	PNP	17				6	1	20†	50†	80†
2N3063	CRY	PNP	17				6	1	50†	100†	150†
2N3064	CRY	PNP	17				6	1	15†	30†	45†
2N3065	CRY	PNP	17				6	1	30†	65†	90†
2N3072	FC SGS	PNP	17				10	10	25	74	180
2N3073	FC SGS	PNP	17				10	10	25	74	180
2N3081	SYL	PNP	17								
2N3081/46	SYL	PNP	17								
2N3081/51	SYL	PNP	81								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
			10	20	75		2N2999
			15	200	360		2N3009
			6	50	300		2N3010
			12	200	360		2N3011
			12	200	360		2N3012
			15	200	360		2N3013
			20	200	360		2N3014
			30		800		2N3015
			80	1A	800		2N3019
			80	1A	800		2N3020
			30	3A	25.0W†		2N3021
			45	3A	25.0W†		2N3022
			60	3A	25.0W†		2N3023
			30	3A	25.0W†		2N3024
			45	3A	25.0W†		2N3025
			60	3A	25.0W†		2N3026
				200	300		2N3033
				200	300		2N3034
				200	300		2N3035
			80	1.2A	800		2N3036
			70	500	360		2N3037
			60	500	360		2N3038
			35	500	1.0W		2N3039
			30	500	1.0W		2N3040
5	10μA	2	45	30	250		2N3043
							2N3044
5	10μA	2	45	30	250		2N3045
5	10μA	2	45	30	250		2N3046
5	10μA	2	45	30	250		2N3047
5	10μA	2	45	30	250		2N3048
							2N3049
5	100μA	2	20	100	250		2N3050
5	100μA	2	20	100	250		2N3051
5	100μA	2	20	100	250		2N3052
			15	200	250		2N3053
			40	700	1.0W		2N3054
			60	4A	25.0W†		2N3055
			70	15A	115.0W†		2N3058
3	10μA	2	6	100	400		2N3059
			6	100	400		2N3060
			60	100	400		2N3061
			60	100	400		2N3062
			80	100	400		2N3063
			100	100	400		2N3064
			100	100	400		2N3065
			60	500	800		2N3072
			60	500	360		2N3073
			50	600	600		2N3081
			50	600	400		2N3081/46
			50	600	300		2N3081/51

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2N3082	GE	NPN	113				5	250		100†	
2N3083	GE	NPN	113				5	250		100†	
2N3108	SGS	NPN	17				5	1		60	
2N3110	SGS	NPN	17				5	1		60	
2N3114	SGS TII	NPN	17				5	1	25	50	
2N3115	MR	NPN	17				10	150	40†		120†
2N3116	MR	NPN	17				10	150	100†		300†
2N3117	SGS SP	NPN	17				5	1	400	620	900
2N3118	RCA	NPN	17								
2N3119	RCA	NPN	17				10	100	50†		200†
2N3120	FC	PNP	17				10	10	25	74	180
2N3121	FC	PNP	17				10	10	25	74	180
2N3128	NAT	NPN	134				5	1	75		
2N3129	NAT	NPN	134				5	1	160		
2N3130	NAT	NPN	134				5	1	110		
2N3131	NAT	NPN	134				1	10	30†		
2N3133	MR	PNP	17				10	1	25†		
2N3134	MR	PNP	17				10	1	50†		
2N3135	MR	PNP	17				10	1	25†		
2N3136	MR	PNP	17				10	1	50†		
2N3137	SGS TH MR	NPN	17				1	0.5	15†	50†	
2N3138	NAT	NPN	73				10	1A	10†		
2N3139	NAT	NPN	73				10	1A	10†		
2N3140	NAT	NPN	73				10	1A	10†		
2N3141	NAT	NPN	73				10	1A	10†		
2N3142	NAT	NPN	35				10	1A	10†		
2N3143	NAT	NPN	35				10	1A	10†		
2N3144	NAT	NPN	35				10	1A	10†		
2N3145	NAT	NPN	35				10	1A	10†		
2N3146	TII	PNP	16	45		60mA	1.5	1A	40†		
2N3147	TII	PNP	16	50		60mA	1.5	1A	40†		
2N3149	SIL	NPN	35				3	50A	10†		
2N3150	SIL	NPN	35				3	50A	10†		
2N3151	SIL	NPN	35				3	50A	10†		
2N3163	SIL	PNP	35				3	1A	12†		36†
2N3163/I	SIL	PNP	35				3	1A	12†		36†
2N3164	SIL	PNP	35				3	1A	12†		36†
2N3164/I	SIL	PNP	35				3	1A	12†		36†
2N3165	SIL	PNP	35				3	1A	12†		36†
2N3165/I	SIL	PNP	35				3	1A	12†		36†
2N3166	SIL	PNP	35				3	1A	12†		46†
2N3166/I	SIL	PNP	35				3	1A	12†		36†
2N3167	SIL	PNP	75				3	1A	12†		36†
2N3167/I	SIL	PNP	75				3	1A	12†		36†
2N3168	SIL	PNP	75				3	1A	12†		36†
2N3168/I	SIL	PNP	75				3	1A	12†		36†
2N3169	SIL	PNP	75				3	1A	12†		36†
2N3169/I	SIL	PNP	75				3	1A	12†		36†
2N3170	SIL	PNP	75				3	1A	12†		36†
2N3170/I	SIL	PNP	75				3	1A	12†		36†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			20		500		2N3082
			20		500		2N3083
10	30μA	3.5	60		800		2N3108
10	30μA	3.5	40		800		2N3110
			150	200	800		2N3114
			20	600	400		2N3115
			20	600	400		2N3116
5	5μA	1*	60	50	360		2N3117
					4.0W		2N3118
					4.0W		2N3119
			45	500	800		2N3120
			45	500	360		2N3121
				100	150		2N3128
				100	150		2N3129
				100	150		2N3130
			15		150		2N3131
			35	600	600		2N3133
			35	600	600		2N3134
			35	600	400		2N3135
			35	600	400		2N3136
3	5*	20	20	150	600		2N3137
			65	2A	20.0W†		2N3138
			140	2A	20.0W†		2N3139
			65	2A	20.0W†		2N3140
			140	2A	20.0W†		2N3141
			65	2A	25.0W†		2N3142
			140	2A	25.0W†		2N3143
			65	2A	25.0W†		2N3144
			140	2A	25.0W†		2N3145
			140	15A	1.75W		2N3146
			160	15A	1.75W		2N3147
			80	70A	300.0W†		2N3149
			100	70A	300.0W†		2N3150
			150	70A	300.0W†		2N3151
			40	3A	85.0W†		2N3163
			40	3A	85.0W†		2N3164
			60	3A	85.0W†		2N3164/I
			60	3A	85.0W†		2N3165
			80	3A	85.0W†		2N3165/I
			80	3A	85.0W†		2N3165/I
			100	3A	85.0W†		2N3166
			100	3A	85.0W†		2N3166/I
			40	3A	85.0W†		2N3167
			40	3A	85.0W†		2N3167/I
			60	3A	85.0W†		2N3168
			60	3A	85.0W†		2N3168/I
			80	3A	85.0W†		2N3169
			80	3A	85.0W†		2N3169/I
			100	3A	85.0W†		2N3170
			100	3A	85.0W†		2N3170/I

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N3171	SIL	PNP	16				3	1A	12†		36†
2N3172	SIL	PNP	16				3	1A	12†		36†
2N3173	SIL	PNP	16				3	1A	12†		36†
2N3174	SIL	PNP	16				3	1A	12†		36†
2N3175	SIL	PNP	35				3	2A	10†		30†
2N3175/I	SIL	PNP	35				3	2A	10†		30†
2N3176	SIL	PNP	35				3	2A	10†		30†
2N3176/I	SIL	PNP	35				3	2A	10†		30†
2N3177	SIL	PNP	35				3	2A	10†		30†
2N3177/I	SIL	PNP	35				3	2A	10†		30†
2N3178	SIL	PNP	35				3	2A	10†		30†
2N3178/I	SIL	PNP	35				3	2A	10†		30†
2N3179	SIL	PNP	75				3	2A	10†		30†
2N3179/I	SIL	PNP	75				3	2A	10†		30†
2N3180	SIL	PNP	75				3	2A	10†		30†
2N3180/I	SIL	PNP	75				3	2A	10†		30†
2N3181	SIL	PNP	75				3	2A	10†		30†
2N3181/I	SIL	PNP	75				3	2A	10†		30†
2N3182	SIL	PNP	75				3	2A	10†		30†
2N3182/I	SIL	PNP	75				3	2A	10†		30†
2N3183	SIL	PNP	16				3	2A	10†		30†
2N3184	SIL	PNP	16				3	2A	10†		30†
2N3185	SIL	PNP	16				3	2A	10†		30†
2N3186	SIL	PNP	16				3	2A	10†		30†
2N3187	SIL	PNP	35				3	2A	10†		30†
2N3187/I	SIL	PNP	35				3	2A	10†		30†
2N3188	SIL	PNP	35				3	2A	10†		30†
2N3188/I	SIL	PNP	35				3	2A	10†		30†
2N3189	SIL	PNP	35				3	2A	10†		30†
2N3189/I	SIL	PNP	35				3	2A	10†		30†
2N3190	SIL	PNP	35				3	2A	10†		30†
2N3190/I	SIL	PNP	35				3	2A	10†		30†
2N3191	SIL	PNP	75				3	2A	10†		30†
2N3191/I	SIL	PNP	75				3	2A	10†		30†
2N3192	SIL	PNP	75				3	2A	10†		30†
2N3192/I	SIL	PNP	75				3	2A	10†		30†
2N3193	SIL	PNP	75				3	2A	10†		30†
2N3193/I	SIL	PNP	75				3	2A	10†		30†
2N3194	SIL	PNP	75				3	2A	10†		30†
2N3194/I	SIL	PNP	75				3	2A	10†		30†
2N3195	SIL	PNP	16				3	2A	10†		30†
2N3196	SIL	PNP	16				3	2A	10†		30†
2N3197	SIL	PNP	16				3	2A	10†		30†
2N3198	SIL	PNP	16				3	2A	10†		30†
2N3199	SIL	PNP	35				2	1A	20†		60†
2N3200	SIL	PNP	35				2	1A	20†		60†
2N3201	SIL	PNP	35				2	1A	20†		60†
2N3202	SIL	PNP	17				2	1A	20†		60†
2N3202/P	SIL	PNP	17				2	1A	20†		60†
2N3202/S	SIL	PNP	17				2	1A	20†		60†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	3A	75.0W†		2N3171
			60	3A	75.0W†		2N3172
			80	3A	75.0W†		2N3173
			100	3A	75.0W†		2N3174
			40	5A	85.0W†		2N3175
			40	5A	85.0W†		2N3175/I
			60	5A	85.0W†		2N3176
			60	5A	85.0W†		2N3176/I
			80	5A	85.0W†		2N3177
			80	5A	85.0W†		2N3177/I
			100	5A	85.0W†		2N3178
			100	5A	85.0W†		2N3178/I
			40	5A	85.0W†		2N3179
			40	5A	85.0W†		2N3179/I
			60	5A	85.0W†		2N3180
			60	5A	85.0W†		2N3180/I
			80	5A	85.0W†		2N3181
			80	5A	85.0W†		2N3181/I
			100	5A	85.0W†		2N3182
			100	5A	85.0W†		2N3182/I
			40	5A	75.0W†		2N3183
			60	5A	75.0W†		2N3184
			80	5A	75.0W†		2N3185
			100	5A	75.0W†		2N3186
			50	5A	85.0W†		2N3187
			50	5A	85.0W†		2N3187/I
			60	5A	85.0W†		2N3188
			60	5A	85.0W†		2N3188/I
			80	5A	85.0W†		2N3189
			80	5A	85.0W†		2N3189/I
			100	5A	85.0W†		2N3190
			100	5A	85.0W†		2N3190/I
			40	5A	85.0W†		2N3191
			40	5A	85.0W†		2N3191/I
			60	5A	85.0W†		2N3192
			60	5A	85.0W†		2N3192/I
			80	5A	85.0W†		2N3193
			80	5A	85.0W†		2N3193/I
			100	5A	85.0W†		2N3194
			100	5A	85.0W†		2N3194/I
			40	5A	75.0W†		2N3195
			60	5A	75.0W†		2N3196
			80	5A	75.0W†		2N3197
			100	5A	75.0W†		2N3198
			40	3A	40.0W†		2N3199
			60	3A	40.0W†		2N3200
			80	3A	40.0W†		2N3201
			40	3A	8.7W†		2N3202
			40	3A	8.7W†		2N3202/P
			40	3A	8.7W†		2N3202/S

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N3203	SIL	PNP	17				2	1A	20†		60†
2N3203/P	SIL	PNP	17				2	1A	20†		60†
2N3203/S	SIL	PNP	17				2	1A	20†		60†
2N3204	SIL	PNP	17				2	1A	20†		60†
2N3204/P	SIL	PNP	17				2	1A	20†		60†
2N3204/S	SIL	PNP	17				2	1A	20†		60†
2N3205	SIL	PNP	35				2	500	20†		60†
2N3206	SIL	PNP	35				2	500	20†		60†
2N3207	SIL	PNP	35				2	500	20†		60†
2N3208	SIL CRY.	PNP	17	20	65 μ A	100 μ A	4	500	10	45	60
2N3209	PC	PNP	17								
2N3217	CRY	PNP	17								
2N3218	CRY	PNP	17								
2N3219	CRY	PNP	17								
2N3220	GE	NPN	17				5	500	20†		60†
2N3221	GE	NPN	17				5	500	40†		120†
2N3222	GE	NPN	17				5	500	20†		60†
2N3227	MR	NPN	17								
2N3229	FER RCA NAT	NPN	73								
2N3230	RCA	NPN	100								
2N3231	RCA	NPN	100								
2N3232	SIL BEN MR	NPN	16				10	3A	18†		40†
2N3233	SIL	NPN	16				10	3A	18†		40†
2N3234	SIL	NPN	16				10	3A	18†		40†
2N3235	SIL	NPN	16								
2N3236	SIL	NPN	16								
2N3237	SIL	NPN	16								
2N3238	SIL	NPN	16								
2N3239	SIL	NPN	16								
2N3240	SIL	NPN	16								
2N3241	RCA	NPN	13				12	10	70	175	250
2N3242	RCA	NPN	13				12	10	100	175	375
2N3244	MR	PNP	17								
2N3245	MR	PNP	17								
2N3246	NAT	NPN	17				5	500 μ A		350†	
2N3247	NAT	NPN	134				5	1	200		600
2N3248	MR	PNP	17								
2N3249	MR	PNP	17								
2N3250	TII MR	PNP	17				10	1	50		200
2N3250A	MR	PNP	17				10	1	50		200
2N3251	TII MR	PNP	17				10	1	100		400
2N3251A	MR	PNP	17				10	1	100		400
2N3252	TII MR	NPN	17								
2N3253	MR	NPN	17								
2N3262	FER	NPN	17				4	500	40†		
2N3263	RCA										
2N3264	RCA										
2N3265	RCA										
2N3266	RCA										
2N3279	MR	PNP	9				10	3	10		100

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			60	3A	8.7W†		2N3203
			60	3A	8.7W†		2N3203/P
			60	3A	8.7W†		2N3203/S
			80	3A	8.7W†		2N3204
			80	3A	8.7W†		2N3204/P
			80	3A	8.7W†		2N3204/S
			40	2A	40.0W†		2N3205
			60	2A	40.0W†		2N3206
			80	2A	40.0W†		2N3207
			40	2A	8.7W		2N3208
			20	200	360		2N3209
			10	100	400		2N3217
			20	100	400		2N3218
			35	100	400		2N3219
				2A	2.0W		2N3220
				2A	2.0W		2N3221
				2A	2.0W		2N3222
			20		360		2N3227
			60	2.5A	17.5W†		2N3229
				7A	25.0W†		2N3230
				7A	25.0W†		2N3231
			60	7.5A	117.0W†		2N3232
			100	7.5A	117.0W†		2N3233
			160	7.5A	117.0W†		2N3234
			55	15A	117.0W†		2N3235
			90	15A	150.0W†		2N3236
			75	20A	200.0W†		2N3237
			80	15A	150.0W†		2N3238
			80	15A	150.0W†		2N3239
			160	15A	150.0W†		2N3240
6	0.5	8	25	100	500		2N3241
6	0.5	4	25	200	500		2N3242
			40	1A	1.0W		2N3244
			50	1A	1.0W		2N3245
			45	50	350		2N3246
5	10μA	1.5		50	150		2N3247
			12		360		2N3248
			12		360		2N3249
5	0.1	6*	40	200	360		2N3250
					360		2N3250A
5	0.1	6*	40	200	360		2N3251
					360		2N3251A
			30	1A	1.0W		2N3252
			40	1A	1.0W		2N3253
				1.5A	1.0W		2N3262
			90	25A	75.0W†		2N3263
			60	25A	75.0W†		2N3264
			90	25A	125.0W†		2N3265
			60	25A	125.0W†		2N3266
			20	50	100		2N3279

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N3280	MR	PNP	9				10	3	10		100
2N3281	MR	PNP	9				10	3	10		150
2N3282	MR	PNP	9				10	3	10		150
2N3283	MR	PNP	9				10	3	10		200
2N3284	MR	PNP	9				10	3	10		200
2N3285	MR	PNP	9				10	3	5		200
2N3286	MR	PNP	9				10	3	5		200
2N3287	MR	NPN	9				10	2	15		150
2N3288	MR	NPN	9				10	2	15		150
2N3289	MR	NPN	9				10	2	10		200
2N3290	MR	NPN	9				10	2	10		200
2N3291	MR	NPN	9				10	2	10		200
2N3292	MR	NPN	9				10	2	10		200
2N3293	MR	NPN	9				10	2	10		200
2N3294	MR	NPN	9				10	2	10		200
2N3295	MR	NPN	17				10	10	20†		60†
2N3296	MR	NPN	73				2	40	5†		50†
2N3297	MR	NPN	16				2	400	2†		35†
2N3298	MR	NPN	17				1	10	60†	90†	120†
2N3299	FC	NPN	17				1	10		72	
2N3300	FC	NPN	17				1	50		48	
2N3301	FC	NPN	17				1	10		72	
2N3302	FC	NPN	17				1	50		48	
2N3303	SGS TII	NPN	17				0.5	10	20†		
2N3304	FC TII	PNP	17				0.3	10	30	63	120
2N3307	MR	PNP	9				10	2	40		250
2N3308	MR	PNP	9				10	2	25		250
2N3309	MR	NPN	17				2	30	5†		100†
2N3311	MR	NPN	25				2	3A	30		90
2N3312	MR	NPN	25				2	3A	30		90
2N3313	MT	NPN	25				2	3A	30		90
2N3314	MT	NPN	25				2	3A	40		120
2N3315	MR	NPN	25				2	3A	40		120
2N3316	MR	NPN	25				2	3A	40		120
2N3323	MR	PNP	17				10	3	30		225
2N3324	MR	PNP	17				10	3	30		225
2N3325	MR	PNP	17				10	3	30		225
2N3327	NAT	NPN	73				10	500	10†		
2N3328	MR	PNP	17				6	1	350	475	800
2N3340	SP	NPN	17				2	10 μ A	40†		
2N3341	SP	PNP	17				2	10 μ A	40†		
2N3342	SP	PNP	17				1	5	30†	80†	
2N3344	SP	PNP	17				5	1	25†	45†	
2N3345	SP	PNP	17				0.5	1	15†	28†	
2N3346	SP	PNP	17				0.5	1	25†	45†	
2N3347	TII	PNP	102				5	1	60		600
2N3348	TII	PNP	102				5	1	60		600
2N3349	TII	PNP	102				5	1	60		600
2N3350	TII	PNP	102				5	1	150		600
2N3351	TII	PNP	102				5	1	150		600

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			30	50	100		2N3280
			30	50	100		2N3281
			30	50	100		2N3282
				50	100		2N3283
				50	100		2N3284
				50	100		2N3285
				50	100		2N3286
			20	50	200		2N3287
			20	50	200		2N3288
			15	50	200		2N3289
			15	50	200		2N3290
			25	50	200		2N3291
			25	50	200		2N3292
			20	50	200		2N3293
			20	50	200		2N3294
			60	250	800		2N3295
			60	700	700		2N3296
			60	1.5A	25.0W†		2N3297
			25	100	300		2N3298
			30		800		2N3299
			30		800		2N3300
			30		360		2N3301
			30		360		2N3302
			12	1A	600		2N3303
			6		300		2N3304
			40	50	200		2N3307
			25	50	200		2N3308
			50	500	1.0W		2N3309
			20	5A	170.0W†		2N3311
			30	5A	170.0W†		2N3312
			40	5A	170.0W†		2N3313
			20	5A	170.0W†		2N3314
			30	5A	170.0W†		2N3315
			40	5A	170.0W†		2N3316
			35	100	150		2N3323
			35	100	150		2N3324
			35	100	150		2N3325
			65	2A	20.0W†		2N3327
							2N3328
			20		400		2N3340
			20		400		2N3341
			8	50	250		2N3342
			30	50	250		2N3344
			50	50	250		2N3345
5	10μA	2	50	50	250		2N3346
5	10μA	2	45	30	300		2N3347
5	10μA	2	45	30	300		2N3348
5	10μA	2	45	30	300		2N3349
5	10μA	2	45	30	300		2N3350
5	10μA	2	45	30	300		2N3351

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N3352	TII	PNP	102	30	100nA		5	1	150		600
2N3375	FER	NPN	73				5	250	5†		50†
2N3390	GE	NPN	116				4.5	2	400†		800†
2N3391	TH GE	NPN	116				10	0.1	170		200
2N3391A	TH GE	NPN	116				10	0.1	170		200
2N3392	TH GE	NPN	116				10	1		208	
2N3393	GE	NPN	116				10	1		150	
2N3394	TH GE	NPN	116				10	1		100	
2N3395(W)	GE	NPN	116				4.5	2	250		500
2N3395(Y)	GE	NPN	116				4.5	2	150†		300†
2N3396(O)	GE	NPN	116				4.5	2	90†		180†
2N3396(W)	GE	NPN	116				4.5	2	250†		500†
2N3396(Y)	GE	NPN	116				4.5	2	150†		300†
2N3397(O)	GE	NPN	116				4.5	2	90†		180†
2N3397(R)	GE	NPN	116				4.5	2	55†		110†
2N3397(W)	GE	NPN	116				4.5	2	250†		500†
2N3397(Y)	GE	NPN	116				4.5	2	150†		300†
2N3398(B)	GE	NPN	116				4.5	2	400†		800†
2N3398(O)	GE	NPN	116				4.5	2	90†		180†
2N3398(R)	GE	NPN	116				4.5	2	55†		110†
2N3398(W)	GE	NPN	116				4.5	2	250†		500†
2N3398(Y)	GE	NPN	116				4.5	2	150†		300†
2N3402	TH	NPN	116				4.5	2	75		225
2N3403	TH	NPN	116				4.5	2	180		540
2N3404	TH	NPN	116				4.5	2	75		225
2N3405	TH	NPN	116				4.5	2	180		540
2N3409	MR	NPN	17				10	1	40†		160†
2N3410	MR	NPN	17				10	1	40†		160†
2N3411	MR	NPN	17				10	1	40†		160†
2N3414	TH	NPN	116				4.5	2	75		225
2N3415	TH	NPN	116				4.5	2	180		540
2N3416	TH	NPN	116				4.5	2	75		225
2N3417	TH	NPN	116				4.5	2	180		540
2N3418	TIF TII	NPN	17								
2N3419	TIF TII	NPN	17								
2N3420	TIF TII	NPN	17								
2N3421	TIF TII	NPN	17								
2N3423	AM FC	NPN	102								
2N3424	AM FC	NPN	102								
2N3427	TIF TII MR	NPN	17				6	1	200	325	500
2N3428	MR	NPN	17				6	1	350	475	800
2N3429	WES SIL	NPN	141				2	5A	10†		16†
2N3430	WES SIL	NPN	141				2	5A	10†		16†
2N3431	WES SIL	NPN	141				2	5A	10†		16†
2N3432	WES SIL	NPN	141				2	5A	10†		16†
2N3433	WES SIL	NPN	141				2	5A	10†		16†
2N3439	RCA FER	NPN	17	300		20 μ A	10	20	40†		160†
2N3440	RCA SP	NPN	17	200		50	10	20	40†		160†
2N3444	TII MR	NPN	17								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	10 μ A	2	45	30	300		2N3352
			40	1.5A	11.6W		2N3375
			25	100	200		2N3390
			25	100	200		2N3391
4.5	0.1	1.9	25	100	200		2N3391A
			25	100	200		2N3392
			25	100	200		2N3393
			25	100	200		2N3394
			25	100	200		2N3395(W)
			25	100	200		2N3395(Y)
			25	100	200		2N3396(O)
			25	100	200		2N3396(W)
			25	100	200		2N3396(Y)
			25	100	200		2N3397(O)
			25	100	200		2N3397(R)
			25	100	200		2N3397(W)
			25	100	200		2N3397(Y)
			25	100	200		2N3398(B)
			25	100	200		2N3398(O)
			25	100	200		2N3398(R)
			25	100	200		2N3398(W)
			25	100	200		2N3398(Y)
					560		2N3402
					560		2N3403
					560		2N3404
					560		2N3405
5	0.1	4*	30	500	600		2N3409
5	0.1	4*	30	500	600		2N3410
5	0.1	4*	30	500	600		2N3411
			25	500	360		2N3414
			25	500	360		2N3415
			50	500	360		2N3416
			50	500	360		2N3417
			60	3A	800		2N3418
			80	3A	800		2N3419
			60	3A	800		2N3420
			80	3A	800		2N3421
			15		300		2N3423
			15		300		2N3424
			30	500	200		2N3427
			30	500	200		2N3428
			50	7.5A	150.0W†		2N3429
			100	7.5A	150.0W†		2N3430
			150	7.5A	150.0W†		2N3431
			200	7.5A	150.0W†		2N3432
			250	7.5A	150.0W†		2N3433
			350	1A	5.0W		2N3439
				1A	1.0W		2N3439
				1A	1.0W		2N3440
			50	1A	1.0W		2N3444

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N3445	put	NPN	16				10	500	20		100
2N3446	MR	NPN	16				10	500	20		100
2N3447	MR	NPN	16				10	500	40		200
2N3448	MR	NPN	16				10	500	40		200
2N3467	MR	PNP	17								
2N3468	MR	PNP	17								
2N3485	MR TII	PNP	17				10	10	35†		
2N3485A	MR TII	PNP	17				10	10	40†		
2N3486	MR TII	PNP	17				10	10	75†		
2N3486A	MR TII	PNP	17				10	10	100†		
2N3487	MR	NPN	35				5	3A	20†		60†
2N3488	MR	NPN	35				5	3A	20†		60†
2N3489	MR	NPN	35				5	3A	15†		45†
2N3490	MR	NPN	35				5	5A	40†		120†
2N3491	MR	NPN	35				5	5A	40†		120†
2N3493	MR	NPN	9				0.5	0.5	40†		120†
2N3494	MR	PNP	17				10	10	40		300
2N3495	MR	PNP	17				10	10	40		300
2N3496	MR	PNP	17				10	10	40		300
2N3497	MR	PNP	17				10	10	40		300
2N3498	MR	NPN	17				10	10	50		300
2N3499	MR	NPN	17				10	10	75		375
2N3500	MR	NPN	17				10	10	50		300
2N3501	MR	NPN	17				10	10	75		375
2N3502	SGS	PNP	17				10	10	135	200	420
2N3503	SGS	PNP	17				10	10	135	200	420
2N3504	SGS	PNP	17				10	10	135	200	420
2N3505	SGS	PNP	17				10	10	135	200	420
2N3506	MR	NPN	17								
2N3507	MR	NPN	17								
2N3508	MR	NPN	17								
2N3509	MR	NPN	17								
2N3510	MR	NPN	17				10	1	20		150
2N3511	MR	NPN	17				10	1	10		150
2N3527	CRY	PNP	17				6	1	100†		400†
2N3544	MR	NPN	17				10	10	25†	50†	
2N3546	MR	PNP	17								
2N3553	FER MR	NPN	17	30		100nA					
2N3554	TII	NPN	17								
2N3570	TII	NPN	9				6	5	20		200
2N3571	TII	NPN	9				6	5	20		250
2N3572	TII	NPN	9				6	5	20		350
2N3576	TII	PNP	17				0.5	10	40†		120†
2N3579	SP	PNP	17				5	1	30		150
2N3580	SP	PNP	17				5	1	60		300
2N3581	SP	PNP	17				5	0.1	50		200
2N3582	SP	PNP	17				5	0.1	100		400
2N3583	RCA	NPN	16	150		10mA	10	100	40†		
2N3584	RCA	NPN	16	150		5mA	10	100	40†		
2N3585	RCA	NPN	16	150		5mA	10	100	40†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			60	7.5A	115.0W†		2N3445
			80	7.5A	115.0W†		2N3446
			60	7.5A	115.0W†		2N3447
			80	7.5A	115.0W†		2N3448
			40	1A	1.0W		2N3467
			50	1A	1.0W		2N3468
			40	600	400		2N3485
			60	600	400		2N3485A
			40	600	400		2N3486
			60	600	400		2N3486A
			60	7.5A	115.0W†		2N3487
			80	7.5A	115.0W†		2N3488
			100	7.5A	115.0W†		2N3489
			60	7.5A	115.0W†		2N3490
			80	7.5A	115.0W†		2N3491
			8		150		2N3493
			80	100	600		2N3494
			120	100	600		2N3495
			80	100	400		2N3496
			120	100	400		2N3497
			100	500	1.0W		2N3498
			100	500	1.0W		2N3499
			150	300	1.0W		2N3500
			150	300	1.0W		2N3501
5	30μA	1	60		700		2N3502
5	30μA	1	60		700		2N3503
5	30μA	1	45		400		2N3504
5	30μA	1	45		400		2N3505
			40	3A	1.0W		2N3506
			50	3A	1.0W		2N3507
			20		400		2N3508
			20		400		2N3509
			10	500	400		2N3510
			15	500	400		2N3511
			30	100	400		2N3527
			25	100	300		2N3544
			12		360		2N3546
			40	1A	7.0W†		2N3553
			30	1.2A	800		2N3554
			15	50	200		2N3570
			15	50	200		2N3571
			13	50	200		2N3572
			15	200	360		2N3576
			60		400		2N3579
			60		400		2N3580
			40		400		2N3581
			40		400		2N3582
			175	2A	35.0W†		2N3583
			250	2A	35.0W†		2N3584
			300	2A	35.0W†		2N3585

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N3588	AMP	PNP	9				10	3	30†	65†	
2N3600	FER	NPN	9				1	3	20†		150†
2N3605	TH	NPN	116				1	10	30		
2N3606	TH	NPN	116				1	10	30		
2N3607	TH	NPN	116				1	10	30		
2N3611	MR	PNP	16	12		30mA	2	500	40		100
2N3612	MR	PNP	16	17		30mA	2	500	40		100
2N3613	MR	PNP	16	12		30mA	2	500	60		150
2N3614	MR	PNP	16	17		30mA	2	500	60		150
2N3615	MR	PNP	16	25		30mA	2	500	40		100
2N3616	MR	PNP	16	30		30mA	2	500	40		100
2N3617	MR	PNP	16	25		30mA	2	500	60		150
2N3618	MR	PNP	16	30		30mA	2	500	60		150
2N3632	FER	NPN	73								
2N3634	MR	PNP	17				10	10	40		160
2N3635	MR	PNP	17				10	10	80		320
2N3636	MR	PNP	17				10	10	40		160
2N3637	MR	PNP	17				10	10	80		320
2N3647	MR	NPN	17				10	1	20		150
2N3648	MR	NPN	17				10	1	20		150
2N3662	TH	NPN	17				10	8	20		
2N3663	TH	NPN	17				10	8	20		
2N3677	CRY	PNP	17								
2N3680	TII	NPN	102	5		10nA	5	1	300		900
2N3702	TIL TII	PNP	116								
2N3703	TIL TII	PNP	116								
2N3704	TII TIL	NPN	116								
2N3705	TIL TII	NPN	116								
2N3706	TIL TII	NPN	116								
2N3707	TIL TII	NPN	116				5	0.1	100		550
2N3708	MR TII	PNP	116				5	1	45		800
2N3708(BL)	TII TIL	NPN	116				5	1	270†		440†
2N3708(BR)	TII TIL	NPN	116				5	1	45†		85†
2N3708(G)	TII TIL	NPN	116				5	1	180†		330†
2N3708(O)	TII TIL	NPN	116				5	1	90†		165†
2N3708(R)	TII TIL	NPN	116				5	1	65†		110†
2N3708(V)	TII TIL	NPN	116				5	1	330†		660†
2N3708(Y)	TII TIL	NPN	116				5	1	135†		220†
2N3709	TIL TII	NPN	116				5	1	45		250
2N3710	TIL TII	NPN	116				5	1	90		450
2N3711	TIL TII	NPN	116				5	1	180		800
2N3712	TII	NPN	17				10	30	25		
2N3713	MR	NPN	16								
2N3714	MR	NPN	16								
2N3715	MR	NPN	16								
2N3716	MR	NPN	16								
2N3719	MR	PNP	17								
2N3720	MR	PNP	17								
2N3733	FER RCA	NPN	73	30		250nA	5	250	10†		150†
2N3742	MR	NPN	17				10	10	20		200
2N3743	MR	PNP	17				10	10	30		300

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
				10	100		2N3588
			15		200		2N3600
			14	200	200		2N3605
			15	200	200		2N3606
			14	200	200		2N3607
			25	7A	85.0W†		2N3611
			35	7A	85.0W†		2N3612
			25	7A	85.0W†		2N3613
			35	7A	85.0W†		2N3614
			50	7A	85.0W†		2N3615
			60	7A	85.0W†		2N3616
			50	7A	85.0W†		2N3617
			60	7A	85.0W†		2N3618
			40	3A	23.0W†		2N3632
			140	1A	1.0W		2N3634
			140	1A	1.0W		2N3635
10	0.5	3*	175	1A	1.0W		2N3636
10	0.5	3*	175	1A	1.0W		2N3637
			10	500	400		2N3647
			15	500	400		2N3648
			12	25	200		2N3662
			12	25	200		2N3663
			20	100	400		2N3677
5	10μA	3*	50	30	300		2N3680
			25	200	300		2N3702
			30	200	300		2N3703
			30	800	360		2N3704
			30	800	360		2N3705
5	0.1	2	20	800	360		2N3706
			30	30	250		2N3707
5	0.1	2	30	30	250		2N3708(BL)
5	0.1	2	30	30	250		2N3708(BR)
5	0.1	2	30	30	250		2N3708(G)
5	0.1	2	30	30	250		2N3708(O)
5	0.1	2	30	30	250		2N3708(R)
5	0.1	2	30	30	250		2N3708(V)
5	0.1	2	30	30	250		2N3708(Y)
5	0.1	2	30	30	250		2N3709
5	0.1	2	30	30	250		2N3710
5	0.1	2	30	30	250		2N3711
			150	200	800		2N3712
			60	10A	150.0W†		2N3713
			80	10A	150.0W†		2N3714
			60	10A	150.0W†		2N3715
			80	10A	150.0W†		2N3716
			40	3A	1.0W		2N3719
			60	3A	1.0W		2N3720
			40	3A	23.0W†		2N3733
			300	50	1.0W		2N3742
			300	50	1.0W		2N3743

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2N3783	MR	PNP	9				10	3	20		200
2N3784	MR	PNP	9				10	3	20		200
2N3785	MR	PNP	9				10	3	15		200
2N3793	NAT	NPN	119				10	10	20†	72†	120†
2N3794	NAT	NPN	119				10	10	100†	170†	600†
2N3798	MR	PNP	17				10	1	150		600
2N3799	MR	PNP	17				10	1	300		900
2N3800	MR	PNP	17				10	1	150		600
2N3801	MR	PNP	17				10	1	300		900
2N3802	MR	PNP	17				10	1	150		600
2N3803	MR	PNP	17				10	1	300		900
2N3804	MR	PNP	17				10	1	150		600
2N3805	MR	PNP	17				10	1	300		900
2N3806	MR	PNP	17				10	1	150		600
2N3807	MR	PNP	17				10	1	300		900
2N3808	MR	PNP	17				10	1	150		600
2N3809	MR	PNP	17				10	1	300		900
2N3810	MR	PNP	17				10	1	150		600
2N3811	MR	PNP	17				10	1	300		900
2N3818	MR	NPN	73				5	50	20†		120†
2N3828	TII	NPN	116								
2N3829	TII	PNP	17	20		0.3 μ A					
2N3830	TII	NPN	17								
2N3831	TII	NPN	17								
2N3832	TII	NPN	9				0.5	2	25†		125†
2N3836	TII	NPN	120	50		10 μ A					
2N3837	TII	NPN	120	50		10 μ A					
2N3850	SSP	NPN	35				1	50		50†	
2N3851	SSP	NPN	35				1	50		50†	
2N3852	SSP	NPN	35				1	50		50†	
2N3853	SSP	NPN	35				1	50		25†	
2N3866	FER	NPN	17	28		20 μ A					
2N3904	MR	NPN	13				10	1	100		400
2N3919	FC	NPN	16								
2NJ5A	KO	PNP								50	
2NJ8A	KO	PNP								75	
2NJ9A	KO	PNP								70	
2NJ9D	KO	PNP								27	
2NJ50	KO	PNP	4				9	0.6		75	
2NJ51	KO	PNP	4				9	1		50	
2NJ52	KO	PNP	4				9	1		40	
2NJ53	KO	PNP	4				1	30		60†	
2NU72	TES	PNP	16				0.2	1.5A	10†		
2NU73	TES	PNP	16				0.2	3A	10†		
2NU74	TES	PNP	16				0.2	10A	20†		60†
2P697	SC	NPN	17								
2P706	SC	NPN	17				1	10	20†		
2P708	SC	NPN	17				1	10	30†		120†
2P914	SC	NPN	17				1	10	30†		120†
2P1420	SC	NPN	17								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
			20	20	150		2N3783
			20	20	150		2N3784
			12	20	150		2N3785
			20		250		2N3793
			20		250		2N3794
10	0.1	1.5	60	60	360		2N3798
10	0.1	0.8	60	50	360		2N3799
			60	50	500		2N3800
			60	50	500		2N3801
			60	50	500		2N3802
			60	50	500		2N3803
			60	50	500		2N3804
			60	50	500		2N3805
			60	50	250		2N3806
			60	50	250		2N3807
			60	50	250		2N3808
			60	50	250		2N3809
			60	50	250		2N3810
			60	50	250		2N3811
				2A	25.0W†		2N3818
			40	100	300		2N3828
			20	200	360		2N3829
			50	1.2A	1W		2N3830
			40	1.2A	1W		2N3831
			10	35	200		2N3832
			60	7A	1W		2N3836
			80	7A	1W		2N3837
			80	5A	30.0W†		2N3850
			80	5A	30.0W†		2N3851
			40	5A	30.0W†		2N3852
			40	5A	30.0W†		2N3853
			30	400	5.0W		2N3866
			40	200	210		2N3904
			40	200	210		2N3904
				10	35		2NJ5A
				10	35		2NJ8A
				50	50		2NJ9A
				10	50		2NJ9D
				10	60		2NJ50
				10	60		2NJ51
				30	80		2NJ52
				30	80		2NJ53
			24	1.5A	4W		2NU72
			24	3.5A	12.5W†		2NU73
			32	15A	50.0W†		2NU74
			30		600		2P697
			20		300		2P706
			15		360		2P708
			15		360		2P914
			30		600		2P1420

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2S001	TIL	NPN	13				5	1	9	12	20
2S002	TIL	NPN	13				5	1	18	25	41
2S003	TIL	NPN	13				5	1	18	25	41
2S004	TIL	NPN	13				5	1	34	49	91
2S005	TIL	NPN	13				5	10	45†	80†	150†
2S012	TIL	NPN	34				10	1A	10†		
2S012A	TIL	NPN	34				15	1.5A	20†	30†	50†
2S013	TIL	NPN	34				10	1A	10†		50†
2S013A	TIL	NPN	34				15	1.5A	15†	25†	50†
2S014	TIL	NPN	13				20	1	18	68	
2S017	TIL	NPN	13				10	25		25	
2S018	TIL	NPN	13				10	25		25	
2S019	TIL	NPN	13				10	25		50	
2S020	TIL	NPN	13				10	25		50	
2S021	TIL	NPN	13				10.5	10	10†		40†
2S022	TIL	NPN	13				10.5	10	15†		50†
2S023	TIL	NPN	13				10.5	10	30†		90†
2S024	TIL	NPN	34	32	750 μ A	10mA					
2S025	TIL	NPN	34	60	750 μ A	10mA					
2S026	TIL	NPN	34	100	750 μ A	10mA					
2S22	TOS	PNP	11								
2S26	TOS	PNP	16				1.5	1A	34†	60†	115†
2S26A	TOS	PNP	16				1.5	1A	34†	60†	115†
2S30	KO	PNP	13				10.5			75	
2S31	KO	PNP	13				10.5			50	
2S32	KO	PNP	13				10.5			27	
2S33	KO	PNP	13				1	50		70	
2S34	KO	PNP	11				1	150		70	
2S35	KO	PNP	13				10.5			75	
2S36	KO	PNP	13				10.5			50	
2S37	KO	PNP	13				1	50		70	
2S38	KO	PNP	11				1	150		70	
2S39	KO	PNP	13				4.5	0.5		45	
2S40	KO	PNP	13				6	1		65	
2S41	KO	PNP	16							63	
2S43	KO	PNP	31				10.5	1		60	
2S45	TOS	PNP	13				6	1		18	
2S46	TOS	PNP	13				6	1	33		200
2S47	TOS	PNP	13				6	1		67	
2S49	TOS	PNP	13				6	1	30	60	
2S50	TOS	PNP	13				6	1		49	
2S51	TOS	PNP	13				6	1		130	
2S52	TOS	PNP	13				6	1	25	55	
2S53	TOS	PNP	13				6	1	20	35	
2S54	TOS	PNP	13				6	1	80	140	300
2S56	TOS	PNP	13				1.5	100		50	
2S56A	TOS	PNP	13				6	50		80†	
2S57	TOS	PNP	31				9	1	19	77	80
2S58	TOS	PNP	31				9	1	19	77	80

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	25	150		2S001
			40	25	150		2S002
			40	25	150		2S003
			40	25	150		2S004
				20	125		2S005
			60	2A	37.0W†		2S012
			70	2A	60.0W†		2S012A
			60	2A	37.0W†		2S013
			60	1.5	60		2S013A
			40	20	125		2S014
			60	200	4.0W		2S017
			100	200	4.0W		2S018
			60	200	4.0W		2S019
			100	200	4.0W		2S020
			60		300		2S021
			25		300		2S022
			25		300		2S023
			32	7.5A	100.0W†		2S024
			60	7.5A	100.0W†		2S025
			100	7.5A	100.0W†		2S026
			25		300		2S22
				1.5A	20.0W†		2S26
			60	1.5A	20.0W†		2S26A
			12	10	35		2S30
			12	10	35		2S31
			20	10	50		2S32
			20	50	50		2S33
			20	150	150		2S34
			16	15	35		2S35
			16	15	35		2S36
			35	50	50		2S37
			25	150	150		2S38
			10	2	20		2S39
			25	50	35		2S40
			12	3A	23		2S41
				1.2A	8.0W		2S42
			35	10	35		2S43
			16	5			2S45
6	1	25	25	50			2S46
6	1	5	25	50			2S47
			16	5			2S49
			16	24	16		2S50
			16	5			2S51
			16	5			2S52
			16	5			2S53
6	1	10	16	5			2S54
			25	50			2S56
			60	50	150		2S56A
				5			2S57
				5			2S58

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2S59	TOS	PNP	31				9	1			
2S60A	TOS	PNP	31				9	1	40	65	500
2S61	KO	PNP	13				6	1		50	
2S64	KO	PNP	13				6	1		65	
2S65	KO	PNP	13				6	1		65	
2S92A	TOS	PNP	31				4.5	1	40	67	82
2S93A	TOS	PNP	31				4.5	1	19	50	82
2S96	KO	PNP								30	
2S97	KO	PNP								30	
2S98	KO	PNP								30	
2S100	NEC	PNP	13				6	1		48	
2S101	NEC	PNP	13				6	1		48	
2S101	TIL	NPN	13				5	10	20†		60†
2S102	NEC	PNP	13				6	1		48	
2S102	TIL	NPN	13				5	5	20		50
2S103	NEC	PNP	13				1	50		70†	
2S103	TIL	NPN	13				5	5	40		100
2S104	NEC	PNP	13				1	50		70†	
2S104	TIL	NPN	13				5	5	80		200
2S105	NEC	PNP	26				2	100		70†	
2S106	NEC	PNP	87				2	100		70†	
2S107	NEC	PNP	16				1	100		70†	
2S108	KO	PNP	31				10.5	1		70	
2S109	KO	PNP	31				10.5	1		60	
2S110	KO	PNP	31				10.5	1		60	
2S111	KO	PNP	31				10.5	1		40	
2S112	KO	PNP	31				10.5	1		45	
2S131	TIL	NPN	17				1	10	20†	40†	
2S175	TOS	PNP	31				9	1	19	78	82
2S189	TOS	PNP	13				1	100	40†	75†	145†
2S301	TIL	PNP	13	80		10 μA	6	1	10		40
2S301	KO	PNP	16								
2S301A	KO	PNP	16								
2S302	TIL	PNP	13	40		10 μA	6	1	15		50
2S302A	TIL	PNP	17				6	0.1	7	11	
2S303	TIL	PNP	13	25		10 μA	6	1	25		75
2S304	TIL	PNP	17	15		10 μA	6	1	45	75	120
2S305	TIL	PNP	13	125		10 μA	6	1	10	15	30
2S306	TIL	PNP	17				3	1	30	80	
2S307	TIL	PNP	17				3	1	30	80	
2S321	TIL	PNP	13	80		10	6	1	10	18	30
2S322	TIL	PNP	13	40		10	6	1	15	20	35
2S322A	TIL	PNP	13				6	0.1	7	11	
2S323	TIL	PNP	13	25		10	6	1	25	35	75
2S324	TIL	PNP	13	15		10	6	1	45	75	120
2S325	TIL	PNP	13	125		10	6	1	10	18	30
2S326	TIL	PNP	13				3	1	30	80	
2S327	TIL	PNP	13				3	1	30	80	
2S501	TIL	NPN	9				5	1	60	250	
2S502	TIL	NPN	9				5	1	150	400	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			18	5	55		2S59
				5			2S60A
			30	50	100		2S61
			16	20	30		2S64
			30	100	50		2S65
				5			2S92A
				5			2S93A
				10	35		2S96
				10	35		2S97
				10	35		2S98
6	1	5		50	100		2S100
6	1	10		50	125		2S101
			25	50	300		2S101
6	1	10		50	180		2S102
			45	50	400		2S102
6	1	10		100	125		2S103
			45	50	400		2S103
6	1	10		100	180		2S104
			45	50	400		2S104
				200	500		2S105
				200	700		2S106
				2A	10.0W†		2S107
			20	10	35		2S108
			20	10	35		2S109
			20	10	35		2S110
			20	10	35		2S111
			20	10	35		2S112
			12	200	300		2S131
				5			2S175
				250			2S189
			80	100	300		2S301
				1.5A	11.0W†		2S301
				1.5A	11.0W†		2S301A
			40	100	300		2S302
2	0.5	8	25	100	300		2S302A
			20	100	300		2S303
2	0.5	6	15	100	300		2S304
2	0.5	6	125	100	300		2S305
			6	10	50		2S306
			15	10	50		2S307
2	0.5	6	80	50	300		2S321
2	0.5	8	40	50	300		2S322
2	0.5	8	25	100	300		2S322A
2	0.5	8	25	50	300		2S323
2	0.5	5	15	50	300		2S324
2	0.5	6	125	50	300		2S325
			6	10	50		2S326
			15	10	50		2S327
5	10μA	5*	25	30	300		2S501
5	10μA	4*	25	30	300		2S502

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2S503	TIL	NPN	9				5	1	200	450	
2S512	TIL	NPN	17				1	1	30		
2S701	TIL	NPN	13	25	200nA	5 μ A	6	1	15	30	50
2S702	TIL	NPN	13	25	300nA	10 μ A	6	1	30	50	90
2S703	TIL	NPN	13	25	400nA	20 μ A	6	1	60	120	250
2S711	TIL	NPN	13	30	5 μ A	50 μ A	10	200	10†	20†	40†
2S712	TIL	NPN	13	30	5 μ A	50 μ A	10	200	20†	40†	80†
2S720	TIL	NPN	75				10	500		30†	
2S721	TIL	NPN	75				15	1A	20†	35†	60†
2S722	TIL	NPN	75	30	1mA	30mA	15	1A	20†	35†	60†
2S723	TIL	NPN	75	60	1mA	30mA	15	1A	40†	85†	120†
2S724	TIL	NPN	34	60	1mA	30mA	15	1A	40†	85†	120†
2S731	TIL	NPN	17				5	5	20		50
2S732	TIL	NPN	17				5	5	40		100
2S733	TIL	NPN	17				5	5	80		200
2S3010	TIL	PNP	17				6	0.1	5	8	
2S3020	TIL	PNP	17				6	0.1	7	11	
2S3021	TIL	PNP	17				6	0.1	7	11	
2S3030	TIL	PNP	17				6	0.1	12	19	
2S3040	TIL	PNP	17				6	0.1	20	39	
2S3210	TIL	PNP	13				6	0.1	5	8	
2S3220	TIL	PNP	13				6	0.1	7	11	
2S3221	TIL	PNP	13				6	0.1	7	11	
2S3230	TIL	PNP	13				6	0.1	12	19	
2S3240	TIL	PNP	13				6	0.1	20	39	
2SA12	HIT	PNP	13				6	1		60	
2SA13	HIT	PNP	13				6	1		60	
2SA14	HIT	PNP	13				6	1		50	
2SA15	HIT	PNP	13				6	1		70	
2SA16	HIT	PNP	13				6	0.6		70	
2SA17	HIT	PNP	13				6	0.5		150	
2SA18	HIT	PNP	13				6	0.5		150	
2SA19	NEC	PNP	13				6	1		20	
2SA20	NEC	PNP	13				6	1		30	
2SA21	NEC	PNP	13				6	1		50	
2SA26	NEC	PNP	17				6	1		60	
2SA30	KO	PNP	13				9	0.6		75	
2SA31	KO	PNP	13				9	1		50	
2SA35	KO	PNP	13				9	0.6		75	
2SA36	KO	PNP	13				10.5	1		50	
2SA37	TOS	PNP	4				6	1		70	
2SA38	TOS	PNP	4				6	1		70	
2SA39	TOS	PNP	4				6	1		49	
2SA40	KO	PNP	13				6	1		65	
2SA41	HIT	PNP	13				6	1		45	
2SA42	HIT	PNP	13				6	1		45	
2SA43	KO	PNP	31				10.5	1		60	
2SA49	TOS	PNP	13				6	1	30	60	
2SA50	TOS	PNP	13				6	1		70	
2SA51	TOS	PNP	13				6	1		70	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	10 μ A	4*	25	30	300		2S503
			12	200	300		2S512
			25	20	100		2S701
			25	20	100		2S702
			25	20	100		2S703
			40	200	600		2S711
			40	200	600		2S712
			120	1A	2.5W		2S720
			60	1A	2.5W		2S721
			60	2A	85.0W†		2S722
			30	2A	85.0W†		2S723
			60	2A	85.0W†		2S724
			30	50	400		2S731
			30	50	400		2S732
			30	50	400		2S733
2	0.5	6	40	100	300		2S3010
2	0.5	8	40	100	300		2S3020
2	0.5	8	15	100	300		2S3021
2	0.5	5	25	100	300		2S3030
2	0.5	5	15	100	300		2S3040
2	0.5	6	40	100	300		2S3210
2	0.5	6	40	100	300		2S3220
2	0.5	8	15	100	300		2S3221
2	0.5	5	25	100	300		2S3230
2	0.5	5	15	100	300		2S3240
			16	15	18		2SA12
			12	15	80		2SA13
			16	15	80		2SA14
			16	15	80		2SA15
			12	15	80		2SA16
			12	15	80		2SA17
			12	15	80		2SA18
				2	15		2SA19
				2	15		2SA20
				2	15		2SA21
				50	125		2SA26
				10	80		2SA30
				10	80		2SA31
				10	80		2SA35
				15	80		2SA36
				5	25		2SA37
				5	25		2SA38
				5	25		2SA39
				50	80		2SA40
			35	40	250		2SA41
			45	40	250		2SA42
				10	35		2SA43
				5	60		2SA49
			16	24	55		2SA50
				5	60		2SA51

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2SA52	TOS	PNP	13				6	1	25	55	
2SA53	TOS	PNP	13				6	1	20	45	
2SA54	NEC	PNP	9				6	2	4	12	
2SA56	NEC	PNP	13				0.3	10	25	40	
2SA57	TOS	PNP	31				9	1	19	77	90
2SA58	TOS	PNP	31				9	1	19	77	90
2SA59	TOS	PNP	31				10.5	1		70	
2SA60	TOS	PNP	31				6	1	40	67	500
2SA64	KO	PNP	13				6	1		65	
2SA65	TOS	PNP	13				6	1		70	
2SA66	TOS	PNP	13				6	1		70	
2SA67	TOS	PNP	13				6	1		70	
2SA69	TOS	PNP	3				6	1		60	
2SA70	TOS	PNP	3				6	1		80	
2SA71	TOS	PNP	3				6	1		150	
2SA72	TOS	PNP	31				6	1	19	49	500
2SA73	TOS	PNP	31				6	1	19	49	500
2SA74	TOS	PNP	31				6	1		70	
2SA75	TOS	PNP	31				3	20		70	
2SA76	TOS	PNP	31				6	1	19	67	500
2SA77	TOS	PNP	31				6	1		70	500
2SA78	TOS	PNP	31				6	1		70	
2SA79	TOS	PNP	13				1.5	100		70	
2SA80	HIT	PNP	31				10.5	1		100	
2SA81	HIT	PNP	31				10.5	1		80	
2SA82	HIT	PNP	31				10.5	1		85	
2SA83	HIT	PNP	31				10.5	1	60	60	
2SA84	HIT	PNP	31				10.5	1		80	
2SA85	HIT	PNP	31				10.5	1		85	
2SA86	HIT	PNP	31				10.5	1		60	
2SA87	HIT	PNP	31				10.5	1.5		100	
2SA88	HIT	PNP	31				10.5	1.5		50	
2SA89	HIT	PNP	31				10.5	1.5		70	
2SA90	HIT	PNP	31				10.5	1.5		60	
2SA92	TOS	PNP	9				4.5	1	40	67	83
2SA93	TOS	PNP	9				4.5	1	19	49	83
2SA101	MAT	PNP	13				6	1		30	
2SA102	MAT	PNP	13				6	1		40	
2SA103	MAT	PNP	13				6	1		50	
2SA104	MAT	PNP	13				6	1		60	
2SA105	KO	PNP	13				3	1		50	
2SA106	KO	PNP	13				3	1		50	
2SA107	KO	PNP	13				3	1		40	
2SA108	KO	PNP	31				9	1		70	
2SA109	KO	PNP	31				9	1		60	
2SA110	KO	PNP	31				9	1		60	
2SA111	KO	PNP	31				9	1		40	
2SA112	KO	PNP	31				12	1		45	
2SA113	KO	PNP	31				12	1		45	
2SA114	KO	PNP	31				12	1		40	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
				5	60		2SA52
				6	50		2SA53
				10	75		2SA54
				50	150		2SA56
				5	55		2SA57
				5	55		2SA58
				5	55		2SA59
				5	55		2SA60
				20	80		2SA64
			18	200	200		2SA65
			18	200	200		2SA66
			18	200	200		2SA67
				10	100		2SA69
				10	100		2SA70
				5	100		2SA71
				5	55		2SA72
				5	55		2SA73
				50	125		2SA74
				50	125		2SA75
				5	55		2SA76
				5	55		2SA77
			40	400	125		2SA78
			18	200	55		2SA79
			20	10	80		2SA80
			20	10	80		2SA81
			20	10	80		2SA82
			25	10	80		2SA83
			25	10	80		2SA84
			25	10	80		2SA85
			45	50	55		2SA86
			30	10	80		2SA87
			30	10	80		2SA88
			30	10	80		2SA89
			30	20	200		2SA90
				5	55		2SA92
				5	55		2SA93
				10	60		2SA101
				10	60		2SA102
				10	60		2SA103
				10	60		2SA104
				10	80		2SA105
				10	80		2SA106
				10	80		2SA107
				10	80		2SA108
				10	80		2SA109
				10	80		2SA110
				10	80		2SA111
				10	80		2SA112
				10	80		2SA113
				10	80		2SA114

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
2SA115	KO	PNP	31				12	1		60	
2SA116	KO	PNP	31				12	1.5		60	
2SA117	KO	PNP	31				12	1.5		40	
2SA118	KO	PNP	31				12	1.5		60	
2SA121	SO	PNP	1				6	1	9	24	82
2SA122	SO	PNP	1				6	1	9	24	82
2SA123	SO	PNP	1				6	1	9	24	82
2SA124	SO	PNP	1				6	1	14	32	82
2SA125	SO	PNP	1				6	1	32	49	66
2SA127	TOS	PNP	31				6	1			
2SA128	TOS	PNP	31				1	400	22†	35†	55†
2SA129	TOS	PNP	31				1	400	45†	70†	160†
2SA130	HIT	PNP	31				3	1		80	
2SA131	HIT	PNP	31				3	1		40	
2SA132	HIT	PNP	31				3	1		80	
2SA133	HIT	PNP	31				3	1		50	
2SA134	HIT	PNP	31				6	1		70	
2SA135	HIT	PNP	31				6	1		70	
2SA136	KO	PNP	13				3	1		75	
2SA137	KO	PNP	13				3	1		50	
2SA144	MAT	PNP	13				6	1		100	
2SA145	MAT	PNP	13				6	1		40	
2SA151	HIT	PNP					3	1		50	
2SA152	HIT	PNP					3	1		55	
2SA153	NEC	PNP	13				6	1		60	
2SA154	NEC	PNP	13				6	1		20	
2SA155	NEC	PNP	13				6	1		30	
2SA156	NEC	PNP	13				6	1		50	
2SA157	NEC	PNP	13				9	1		50	
2SA159	NEC	PNP	13				6	1		50	
2SA160	NEC	PNP	13				6	1		60	
2SA161	SO	PNP	17				6	20		13	
2SA162	SO	PNP	17				6	20		25	
2SA163	SO	PNP	17				6	20		66	
2SA164	SO	PNP	17				6	20		13	
2SA165	SO	PNP	17				6	20		25	
2SA166	SO	PNP	17				6	20		66	
2SA167	NEC	PNP	13				6	1	40	70	180
2SA168	NEC	PNP	13				6	1	40	70	180
2SA168A	NEC	PNP	13				6	1	40	70	180
2SA169	NEC	PNP	13				1	10	45†	70†	250†
2SA170	NEC	PNP	13				1	10	45†	70†	250†
2SA171	NEC	PNP	13				1	10	30†	50†	250†
2SA172	NEC	PNP	13				0.35	200	20†	40†	250†
2SA173	NEC	PNP	13				1	10	30†	60†	250†
2SA174	NEC	PNP	13				1	10	30†	60†	250†
2SA175	TOS	PNP	9				9	1	19	80	
2SA180	SEC	PNP	13				6	1		70	
2SA181	SEC	PNP	13				6	1		65	
2SA182	SEC	PNP	13				6	1		40	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
				10	80		2SA115
				10	80		2SA116
				10	80		2SA117
				10	80		2SA118
			15	2	15		2SA121
			15	2	15		2SA122
			15	2	15		2SA123
			15	2	15		2SA124
			15	2	15		2SA125
				50	150		2SA127
				500	170		2SA128
				500	170		2SA129
				10	80		2SA130
				10	80		2SA131
				10	80		2SA132
				10	80		2SA133
				10	80		2SA134
				10	80		2SA135
				10	80		2SA136
				10	80		2SA137
				15	100		2SA144
				10	100		2SA145
				15	80		2SA151
				15	80		2SA152
				4	20		2SA153
				4	20		2SA154
				4	20		2SA155
				4	20		2SA156
				4	20		2SA157
				4	20		2SA159
				4	20		2SA160
				15	50		2SA161
				15	50		2SA162
				15	50		2SA163
				15	50		2SA164
				15	50		2SA165
				15	50		2SA166
6	1	6		50	125		2SA167
6	1	6		50	175		2SA168
6	1	6		50	175		2SA168A
				50	125		2SA169
				50	175		2SA170
				50	125		2SA171
				200	175		2SA172
				50	125		2SA173
				50	175		2SA174
				5	55		2SA175
				10	50		2SA180
				10	50		2SA181
				10	50		2SA182

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
2SA183	SEC	PNP	13				6	1		30	
2SA201	SEC	PNP	13				6	1		49	
2SA202	SEC	PNP	13				6	1		70	
2SA203	SEC	PNP	13				6	1		31	
2SA204	NEC	PNP	13				1	10	20†	60†	150†
2SA205	NEC	PNP	13				1	10	20†	40†	150†
2SA206	NEC	PNP	13				1	10	30†	55†	150†
2SA207	NEC	PNP	13				1	10	40†	55†	150†
2SA208	HIT	PNP	17				0.3	200	15†		100†
2SA209	HIT	PNP	17				0.3	200	30†		120†
2SA210	HIT	PNP	17				0.3	200		68	
2SA211	HIT	PNP	17				0.3	100		50	
2SA212	HIT	PNP	17				0.3	100		50	
2SA213	NEC	PNP	13				6	1		25	
2SA214	NEC	PNP	13				6	1		25	
2SA215	NEC	PNP	13				6	1		40	
2SA216	NEC	PNP	13				6	1		40	
2SA217	HIT	PNP	17				0.3	100		50	
2SA218	SEC	PNP	31				6	1		48	
2SA219	SEC	PNP	31				6	1		50	
2SA221	SEC	PNP	31				6	1		75	
2SA222	SEC	PNP	13				6	1	130		
2SA223	SEC	PNP	31				6	1		50	
2SA224	SEC	PNP	31				6	1		80	
2SA226	SEC	PNP	31				6	1		120	
2SA228	SEC	PNP	9				6	1	70		
2SA229	TOS	PNP	9				6	2		10	
2SA230	TOS	PNP	9				6	2	4	9	
2SA231	HIT	PNP	13				6	70		60	
2SA232	HIT	PNP	13				6	70		90	
2SA233	HIT	PNP	13				6	1		50	
2SA234	HIT	PNP	31				6	1		60	
2SA235	HIT	PNP	31				6	1		80	
2SA236	TOS	PNP	31				6	1		50	
2SA237	TOS	PNP	31				6	1		50	
2SA238	NEC	PNP	13				6	1	10	30	100
2SA239	TOS	PNP	9				6	2		10	
2SA240	TOS	PNP	9				6	2		20	
2SA244	NEC	PNP	13				6	5		40	
2SA245	NEC	PNP	13				6	5		20	
2SA246	HIT	PNP	31				6	5	20	70	175
2SA246A	HIT	PNP	31				6	5	20	70	175
2SA246B	HIT	PNP	31				6	5	20	70	175
2SA247	HIT	PNP	31				3	20		125†	
2SA248	TOS	PNP	31				1	20		50†	
2SA254	HIT	PNP	13				9	1		70	
2SA255	KO	PNP	10				6	1		50	
2SA257	KO	PNP	10				6	1		60	
2SA260	SEC	PNP	9				6	2	2		10
2SA261	SEC	PNP	9				6	2		10	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
6	1	6		10	50		2SA183
				5	30		2SA201
				5	30		2SA202
				5	30		2SA203
				200	150		2SA204
				200	200		2SA205
				200	200		2SA206
				200	200		2SA207
				400	120		2SA208
				400	120		2SA209
				400	120		2SA210
				100	120		2SA211
				100	120		2SA212
				2	15		2SA213
				2	15		2SA214
				2	15		2SA215
				2	15		2SA216
				100	120		2SA217
				10	50		2SA218
				10	50		2SA219
				10	50		2SA221
				10	50		2SA222
				10	50		2SA223
				10	50		2SA224
				10	50		2SA226
				10	100		2SA228
			18	5	75		2SA229
			18	5	75		2SA230
				400	500		2SA231
				400	500		2SA232
				10	80		2SA233
				10	80		2SA234
				10	80		2SA235
				5	55		2SA236
				5	55		2SA237
				30	200		2SA238
				5	75		2SA239
				5	75		2SA240
				30	200		2SA244
				30	200		2SA245
				30	100		2SA246
			25	30	100		2SA246A
				30	100		2SA246B
			10	30	100		2SA247
				200	125		2SA248
				24	55		2SA254
				10	55		2SA255
				10	55		2SA257
				5	40		2SA260
				5	40		2SA261

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
2SA262	SEC	PNP	9				6	2		10	
2SA263	SEC	PNP	9				6	2		10	
2SA264	SEC	PNP	9				6	2		10	
2SA265	SEC	PNP	9				6	2		10	
2SA268	KO	PNP	13				6	1		45	
2SA276	TOS	PNP	9				0.5	10	20†	60†	150†
2SA277	TOS	PNP	13				1	24	30†	50†	150†
2SA278	TOS	PNP	13				1	24	34†	100†	
2SA279	MAT	PNP	3				2	10		100†	
2SA282	TOS	PNP	13				0.5	100		80†	
2SA283	TOS	PNP	13				0.5	100	33†	80†	
2SA284	TOS	PNP	13				0.5	100	38	80	
2SA285	NEC	PNP	10				6	1		70	
2SA288	HIT	PNP	3				6	3		20	
2SA289	HIT	PNP	3				6	3		20	
2SA290	HIT	PNP	3				6	3		20	
2SA298	YEC	PNP	31				6	1		55	
2SA324	SEC	PNP	31				6	1			
2SA325	YEC	PNP	13				1	80		60†	
2SA341	MAT	PNP	9				6	1		100	
2SA343	MAT	PNP	3				6	1		100	
2SA350	HIT	PNP	13				9	1		90	
2SA351	HIT	PNP	14				9	1		70	
2SA352	HIT	PNP	13				9	1		75	
2SA353	HIT	PNP	13				9	1		70	
2SA354	HIT	PNP	13				9	1		70	
2SA355	HIT	PNP	13				9	1		90	
2SA356	HIT	PNP	13				3	1		80	
2SA357	HIT	PNP	13				3	1		80	
2SA358	HIT	PNP	13				9	1		90	
2SA377	MAT	PNP	9				6	1		100	
2SA380	YEC	PNP	13				6	1		70	
2SA382	YEC	PNP	13				6	1		55	
2SA401	HIT	PNP	31				6	5	20	70	175
2SA403	NEC	PNP	9				6	2	4	10	
2SA404	NEC	PNP	9				6	2	4	12	
2SA406	NEC	PNP	17				6	1	30	60	180
2SA407	NEC	PNP	13				6	1	40	70	180
2SA408	FUJ	PNP	13				1	15		100†	
2SA409	FUJ	PNP	13				1	15		100†	
2SA412	HIT	PNP	13				0.5	30	30†		
2SA419	SEC	PNP	9				6	2		20	
2SA420	SEC	PNP	9				6	2		20	
2SA427	TOS	PNP	9				6	1		60	
2SA428	TOS	PNP	9				6	1		80	
2SB22	SEC	PNP	13				1.5	30		95	
2SB23	SEC	PNP	13				6	1			
2SB25	TOS	PNP	16				1.5	1A	34†	60†	115†
2SB26	TOS	PNP	16				1.5	1A	34†	60†	110†
2SB27	SO	PNP	16				1.5	200	18†		46†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
				5	40		2SA262
				5	40		2SA263
				5	40		2SA264
				5	45		2SA265
			10		80		2SA268
					80		2SA270
				20	75		2SA276
				40	65		2SA277
				40	65		2SA278
				200	150		2SA282
			18	200	150		2SA283
			18	200	150		2SA284
				15	50		2SA285
			20	10	80		2SA288
			20	10	80		2SA289
			20	10	80		2SA290
				10	80		2SA298
				10	50		2SA324
			10		80		2SA325
				10	63		2SA341
				5	83		2SA343
			20	10	80		2SA350
			20	10	80		2SA351
			20	10	80		2SA352
			25	10	80		2SA353
			25	10	80		2SA354
					80		2SA355
			9	10	80		2SA356
			9	10	30		2SA357
			75	50	125		2SA358
				5	50		2SA377
					80		2SA380
				10	80		2SA382
			25	40	130		2SA401
				10	75		2SA403
				10	75		2SA404
				200	200		2SA406
				200	200		2SA407
				50	50		2SA408
				50	50		2SA409
			12	100	150		2SA412
				5	50		2SA419
				15	100		2SA420
				15	100		2SA427
					100		2SA428
				75	100		2SB22
				10	40		2SB23
			60	1.5A	20.0W†		2SB25
			32	1.5A	20.0W†		2SB26
			15	50C	5.0W†		2SB27

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2SB28	SO	PNP	16				1.5	200	35†	68†	96†
2SB29	SO	PNP	16				1.5	200	72†	115†	186†
2SB30	SO	PNP	16				1.5	200	35†	68†	115†
2SB31	SO	PNP	16				1.5	200	72†	96†	186†
2SB32	KO	PNP	13				6	2	4	9	
2SB33	KO	PNP	13				1	50		70†	
2SB34	KO	PNP	3				1	150		70†	
2SB37	KO	PNP	13				1	50		70†	
2SB38	KO	PNP	11				1	150		70†	
2SB39	KO	PNP	13				4	0.5		45	
2SB40	TOS	PNP	13				1	100		100†	
2SB41	KO	PNP	16								
2SB42	KO	PNP	16								
2SB43	TOS	PNP	13				1	50	40†	70†	110†
2SB44	TOS	PNP	13				6	1	45	110	220
2SB46	TOS	PNP	13				6	1		150	
2SB47	TOS	PNP	13				1.5	0.5	60	120	150
2SB48	SO	PNP	13				6	1	21	36	62
2SB49	SO	PNP	13				6	1	38	66	110
2SB50	SO	PNP	13				6	1	66	99	142
2SB51	SO	PNP	13				6	1	21	36	62
2SB52	SO	PNP	13				6	1	38	66	110
2SB53	SO	NPN	1				6	1	41	55	66
2SB54	TOS	PNP	13				6	1	80	140	300
2SB55	TOS	PNP	13				1.5	50	45†	80†	125†
2SB56	TOS	PNP	13				1.5	50	45†	80†	125†
2SB61	KO	PNP	13				6	1		50	
2SB62	TOS	PNP	16				1.0	500	30†	60†	125†
2SB63	TOS	PNP	16				1	500	30†	60†	125†
2SB64	KO										
2SB65	KO	PNP	13				6	1		65	
2SB66	HIT	PNP	13				6	1		60	
2SB67	HIT	PNP	13				6	1		45	
2SB67A	HIT	PNP	1				6	1		45	
2SB68	HIT	PNP	17				0.3	5	20	60	
2SB69	TOS	PNP	16				1.5	1A	34†	60†	110†
2SB73	HIT	PNP	13				4.5	0.5		70	
2SB74	HIT	PNP	13				6	1		48	
2SB75	HIT	PNP	13				6	1		55	
2SB75A	HIT	PNP	13				6	1		55	
2SB76	HIT	PNP	13				6	1		55	
2SB77	HIT	PNP	13				1.5	50		70†	
2SB77A	HIT	PNP	13				1.5	50		85†	
2SB78	HIT	PNP	13				1.5	50		70†	
2SB80	HIT	PNP	15				1.5	500		70†	
2SB81	HIT	PNP	16				3	100	30†	45†	110†
2SB82	HIT	PNP	16				3	100	22†	40†	110†
2SB83	HIT	PNP	16				1.5	700	30†	70†	120†
2SB84	HIT	PNP	16				1.5	700	30†	70†	120†
2SB85	HIT	PNP	16								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			15	500	5.0W		2SB28
			15	500	5.0W		2SB29
			15	500	5.0W		2SB30
			15	500	5.0W		2SB31
				50	150		2SB32
				50	150		2SB33
				150	250		2SB34
				50	150		2SB37
				150	250		2SB38
				2	50		2SB39
				100	80		2SB40
				1.2A	8.0W		2SB41
				1.2A	8.0W		2SB42
				50	150		2SB43
				50	80		2SB44
				50	80		2SB46
6	1	4.5		50	80		2SB47
6	1	6	16	100	140		2SB48
6	1	6	16	100	140		2SB49
6	1	6	16	100	140		2SB50
6	1	6	20	200	200		2SB51
6	1	6	20	200	200		2SB52
6	1	6	25	250	200		2SB53
6	1	10		50	125		2SB54
				50	150		2SB55
			60	50	150		2SB56
				50	150		2SB61
			60	500	4.0W		2SB62
			32	500	4.0W		2SB63
							2SB64
				100	150		2SB65
			30	50	100		2SB66
			55	150	350		2SB67
6	1	10	60	150	350†		2SB67A
			105	100	50		2SB68
				6A	25.0W†		2SB69
4	0.5	4	10	2	50		2SB73
			16	15	80		2SB74
4	0.5	7	25	70	150		2SB75
6	1	7	45	100	150		2SB75A
4	0.5	10	12	70	150		2SB76
			25	70	150		2SB77
			45	100	150		2SB77A
			12	70	150		2SB78
			25	1A	4.0W		2SB80
			18	500	2.0W		2SB81
			100	500	2.0W		2SB82
			40	3A	12.0W†		2SB83
			60	3A	12.0W†		2SB84
			40	5A	50.0W†		2SB85

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
2SB86	HIT	PNP	16				1.5	4A	14†		
2SB87	HIT	PNP	16				1.5	4A	20†		
2SB89	HIT	PNP	1				1	150		65†	
2SB89A	HIT	PNP	1				1	150		65†	
2SB90	TOS	PNP	29				6	1	32	66	120
2SB91	TOS	PNP	29				1	20	40†	70†	120†
2SB94	TOS	PNP	13				6	1		150	
2SB97	TOS	PNP	29				6	1		70	
2SB98	NEC	PNP	13				6	1	15	40	90
2SB99	NEC	PNP	13				6	1	90	120	250
2SB100	NEC	PNP	13				6	1	40	60	80
2SB101	NEC	PNP	13				6	1	40	60	80
2SB102	NEC	PNP	13				6	1	40	60	80
2SB103	NEC	PNP	13				6	50	60†	90†	120†
2SB104	NEC	PNP	13				6	50	60†	90†	120†
2SB105	NEC	PNP	83				2	200	20†	70†	120†
2SB106	NEC	PNP	83				2	200	20†	70†	120†
2SB107	NEC	PNP	16				2	1A	20†	70†	120†
2SB107A	NEC	PNP	16				2	1A	20†	70†	120†
2SB108	NEC	PNP	83				2	200	15†	70†	130†
2SB108A	NEC	PNP	83				2	200	15†	70†	130†
2SB108B	NEC	PNP	83				2	200	15†	70†	130†
2SB109	NEC	PNP	83				2	200	15†	70†	130†
2SB109A	NEC	PNP	83				2	200	15†	70†	130†
2SB109B	NEC	PNP	83				2	200	15†	70†	120†
2SB110	NEC	PNP	13				6	1	18	30	41
2SB111	NEC	PNP	13				6	1	30	45	57
2SB112	NEC	PNP	13				6	1	43	60	79
2SB113	NEC	PNP	13				6	1	61	80	101
2SB114	NEC	PNP	13				1	20	45†	65†	85†
2SB115	NEC	PNP	13				1	20	60†	85†	100†
2SB116	NEC	PNP	13				1	20	80†	110†	145†
2SB117	NEC	PNP	13				1	20	105†	140†	235†
2SB119	MAT	PNP									
2SB119A	MAT	PNP									
2SB120	KO	PNP	13				12	2		70	
2SB121	KO	PNP	13				0.35	5		60†	
2SB122	TOS	PNP	16				1.5	1A	34†	60†	110†
2SB123	TOS	PNP	16				1.5	1A	75†	150†	280†
2SB124	TOS	PNP	82				1.5	15A	43†	70†	190†
2SB125	TOS	PNP	82				1.5	15A	43†	70†	190†
2SB126	MAT	PNP	16				1	3A	15†		50†
2SB127	MAT	PNP	16				1	3A	26†		100†
2SB128	MAT	PNP	16				1	6A	16†		36†
2SB128A	MAT	PNP	16				1	6A	16†		36†
2SB129	MAT	PNP	16				1	6A	30†		80†
2SB129A	MAT	PNP	16				1	6A	30†		80†
2SB130	MAT	PNP	16				1	1.5A		20†	
2SB131	KO	PNP	16				1.5	700		70†	
2SB132	KO	PNP	16				1.5	700		70†	

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I'_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
2SB140	SO	PNP	16				1	1A	62†	74†	89†
2SB141	SO	PNP	16				1	1A	62†	74†	89†
2SB142	SO	PNP	16				1	1A	12†	24†	31†
2SB143	SO	PNP	16				1.5	1A	23†	37†	59†
2SB143P	SO	PNP	16				1.5	1A	23†	37†	59†
2SB144	SO	PNP	16				1.5	1A	45†	75†	119†
2SB144P	SO	PNP	16				1.5	1A	45†	75†	119†
2SB145	SO	PNP	16				1.5	1A	23†	37†	59†
2SB146	SO	PNP	16				1.5	1A	45†	75†	119†
2SB147	SO	PNP	16				1.5	200	28†	60†	119†
2SB148	TOS	PNP	82				1.5	15A		70†	
2SB149	TOS	PNP	16				1.5	15A		70†	
2SB150	TOS	PNP	13				1	20	20	35	60
2SB151	KO	PNP	16				1.5	1A		75†	
2SB152	KO	PNP	16				1.5	1A		75†	
2SB153	HIT	PNP					3	1		70	
2SB154	HIT	PNP					1.5	50		70†	
2SB155	HIT	PNP	13				4.5	1		37	
2SB156	HIT	PNP	13				1	150		60†	
2SB156A	HIT	PNP	13				1	150		60†	
2SB157	MAT	PNP	24				1.5	0.5		50	
2SB158	MAT	PNP	24				1.5	0.5		65	
2SB159	MAT	PNP	24				1.5	0.5		65	
2SB160	MAT	PNP	24								
2SB161	NEC	PNP	13				1	50	34†	50†	64†
2SB162	NEC	PNP	87				1	50	34†	50†	64†
2SB163	NEC	PNP	13				1	50	46†	70†	93†
2SB164	NEC	PNP	87				1	50	46†	70†	93†
2SB165	NEC	PNP	13				1	50	67	100	138
2SB166	NEC	PNP	87				1	50	67	100	138
2SB168	KO	PNP	13				3	1		60	
2SB169	KO	PNP	13				1	50		80†	
2SB170	MAT	PNP	13				2	0.5		30	
2SB171	MAT	PNP	13				2	3		47	
2SB172	MAT	PNP	13				1	100		50†	
2SB174	MAT	PNP	1				6	5		85	
2SB175	MAT	PNP	13				2	3		90	
2SB176	MAT	PNP	13				6	10		120	
2SB180	KO	PNP	76				1.5	500		70†	
2SB181	KO	PNP	76				1.5	500		70†	
2SB183	HIT	PNP					0.5	0.25		55	
2SB184	HIT	PNP					2	5		100	
2SB185	SEC	PNP	13				1.5	30		45	
2SB186	SEC	PNP	13				1.5	30		170	
2SB187	SEC	PNP	13				1.5	30		100	
2SB188	SEC	PNP	13								
2SB189	TOS	PNP	13				1	100	40†	75†	145†
2SB199	KO	PNP	11				1	150		80†	
2SB200	TOS	PNP	13				1	150	30†	75†	150†
2SB201	TOS	PNP	13				1	150	40†	150†	300†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			20	1.5A	12.0W†		2SB140
			40	1.5A	12.0W†		2SB141
			30	1A	10.0W†		2SB142
			30	1A	10.0W†		2SB143
			30	1A			2SB143P
			30	1A	10.0W†		2SB144
			30	1A			2SB144P
			30	1A	10.0W†		2SB145
			30	1A	10.0W†		2SB146
			60	1.5A			2SB147
			80	15A	40.0W†		2SB148
			40	8A	25.0W†		2SB149
			40	40	50		2SB150
			50	5A	30.0W†		2SB151
			65	5A	30.0W†		2SB152
				70	150		2SB153
				70	150		2SB154
				300	130		2SB155
			16	300	450		2SB156
			20	300	150		2SB156A
				10	10		2SB157
				10	10		2SB158
				10	10		2SB159
				10	10		2SB160
6	1	10		100	125		2SB161
				100	180		2SB162
6	1	10		100	125		2SB163
6	1	10		100	180		2SB164
6	1	10		100	125		2SB165
6	1	10		100	180		2SB166
				100	150		2SB168
				100	150		2SB169
				50	125		2SB170
				50	125		2SB171
				250	125		2SB172
				300	225		2SB174
				50	125		2SB175
				250	125		2SB176
				500	4.0W		2SB180
				500	4.0W		2SB181
		10*		20	50		2SB183
				20	50		2SB184
				50	150		2SB185
				50	150		2SB186
				50	150		2SB187
				50	150		2SB188
				250	250		2SB189
				300	250		2SB199
			32	400	250		2SB200
			35	400	160		2SB201

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2SB202	TOS	PNP	13				1	150	70†	140†	290†
2SB203	SEM	PNP	16				1.5	15A	20†	40†	
2SB204	SEM	PNP	16				1.5	15A	50†	100†	
2SB205	SEM	PNP	16				1.5	15A	20†	40†	
2SB206	SEM	PNP	16				1.5	15A	50†	100†	
2SB207	SEM	PNP	16				1.5	15A	20†	40†	
2SB209	SEM	PNP	16				1.5	15A	20†	40†	
2SB210	SEM	PNP	16				1.5	15A	50†	100†	
2SB211	SEM	PNP	16				1.5	15A	20†	40†	
2SB212	SEM	PNP	16				1.5	15A	50†	100†	
2SB213	SEM	PNP	16				1.5	15A	20†	40†	
2SB214	SEM	PNP	16				1.5	1A	50†	100†	
2SB215	SEC	PNP	16				1.5	200	20†	70†	200†
2SB216	SEC	PNP	16				1.5	200	25†	70†	200†
2SB217	SEC	PNP	16				1.5	200	25†	70†	200†
2SB218	NEC	PNP	17				1	100	17†	50†	110†
2SB219	NEC	PNP	13				1	20	19†	31†	42†
2SB220	NEC	PNP	13				1	20	34	50	65
2SB221	NEC	PNP	13				1	20	53	72	90
2SB222	NEC	PNP	13				1	20	72	97	121
2SB223	NEC	PNP	13				1	20	99	150	198
2SB224	NEC	PNP	13				1	20	19†	35†	42†
2SB225	NEC	PNP	13				1	20	34†	52†	65†
2SB226	NEC	PNP	13				1	20	53†	73†	90†
2SB227	NEC	PNP	13				1	20	72†	91†	121†
2SB228	HIT	PNP	16				1.5	4A	20†		
2SB229	HIT	PNP	16				1.5	4A	20†		
2SB230	HIT	PNP	16				1.5	4A	20†		
2SB231	TOS	PNP	16								
2SB235	TOS	PNP	25				1.5	15A	43†		190†
2SB236	TOS	PNP	25				1.5	15A	43†		190†
2SB237	TOS	PNP	25				1.5	15A	43†		190†
2SB239	NEC	PNP	13				1	300	30†	60†	90†
2SB239A	NEC	PNP	13				1	300	30†	60†	90†
2SB240	NEC	PNP	13				1	300	30†	60†	90†
2SB240A	NEC	PNP	13				1	300	30†	60†	90†
2SB241	NEC	PNP	13				1	300	30†	60†	90†
2SB241A	NEC	PNP	13				1	300	30†	60†	90†
2SB242	NEC	PNP	13				1	300	20†	40†	60†
2SB242A	NEC	PNP	13				1	300	20†	40†	60†
2SB243	NEC	PNP	13				1	300	40†	60†	150†
2SB243A	NEC	PNP	13				1	300	40†	60†	150†
2SB244	NEC	PNP	13				1	300	20†	40†	60†
2SB244A	NEC	PNP	13				1	300	20†	40†	60†
2SB245	NEC	PNP	13				1	300	40†	60†	150†
2SB245A	NEC	PNP	13				1	300	40†	60†	150†
2SB247	NEC	PNP	16				1	2A	40†	60†	80†
2SB248	NEC	PNP	16				1	2A	40†	60†	80†
2SB248A	NEC	PNP	16				1	2A	40†	60†	80†
2SB251	NEC	PNP	16				1.5	1A	50†	80†	140†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
					100		2SB202
			30	20A	80.0W†		2SB203
			30	30A	80.0W†		2SB204
			60	20A	80.0W†		2SB205
			60	30A	80.0W†		2SB206
			75	20A	80.0W†		2SB207
			30	20A	80.0W†		2SB209
			30	30A	80.0W†		2SB210
			60	20A	80.0W†		2SB211
			60	30A	80.0W†		2SB212
			75	20A	80.0W†		2SB213
			75	30A	80.0W†		2SB214
			100	3A			2SB215
				1.5A			2SB216
				1.5A			2SB217
				500	225		2SB218
6	1	8		200	225		2SB219
6	1	8		200	225		2SB220
6	1	8		200	225		2SB221
				200	225		2SB222
6	1	8		200	225		2SB223
6	1	6		500	225		2SB224
6	1	6		500	225		2SB225
6	1	6		500	225		2SB226
6	1	6		500	225		2SB227
			35	5A			2SB228
			40	5A			2SB229
			50	5A			2SB230
			120	6A			2SB231
			80	15A	60.0W†		2SB235
			60	15A	60.0W†		2SB236
			36	15A	60.0W†		2SB237
				1A	13.0W†		2SB239
				1A	13.0W†		2SB239A
			30	1A	13.0W†		2SB240
			40	1A	13.0W†		2SB240A
			45	1A	13.0W†		2SB241
			50	1A	13.0W†		2SB241A
			20	1A	13.0W†		2SB242
			30	1A	13.0W†		2SB242A
			20	1A	13.0W†		2SB243
			30	1A	13.0W†		2SB243A
			40	1A	13.0W†		2SB244
			40	1A	13.0W†		2SB244A
			40	1A	13.0W†		2SB245
			40	1A	12.0W†		2SB245A
			35	5A	54.0W†		2SB247
			20	5A	54.0W†		2SB248
			35	5A	54.0W†		2SB248A
			20	5A	54.0W†		2SB251

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
2SB251A	NEC	PNP	16				1.5	1A	50†	80†	140†
2SB252	NEC	PNP	16				1.5	500		62†	
2SB252A	NEC	PNP	16				1.5	500		62†	
2SB253	NEC	PNP	16				1.5	500		90†	
2SB253A	NEC	PNP	16				1.5	500		90†	
2SB257	TOS	PNP	13				6	1	50†	125†	200†
2SB258	TOS	PNP	25				1.5	5A	46†		278†
2SB259	TOS	PNP	25				1.5	5A	38†		278†
2SB260	TOS	PNP	25				1.5	5A	38†		278†
2SB264	NEC	PNP	13				1.5	0.5	45	70	100
2SB265	TOS	PNP	13				1	100	43†	100†	200†
2SB274	HIT	PNP	16				1.5	1A		50†	
2SB275	HIT	PNP	16				1.5	4A		40†	
2SB276	HIT	PNP	16				1.5	10A		35†	
2SB292	TOS	PNP	13				1	5μA		85	
2SB302	HIT	PNP	13				6	1		80	
2SB303	SEC	PNP	13				1.5	0.5		150	
2SB322	TOS	PNP	10				1	20	45†	65†	90†
2SB326	NEC	PNP	17				1	20	70†	110†	150†
2SB327	NEC	PNP	17				1	20			
2SB328	NEC	PNP	13				1	20	20†	80†	150†
2SB329	NEC	PNP	13				1	20	80†	150†	300†
2SB330	NEC	PNP	13				1	20	15†	35†	150†
2SB331	HIT	PNP	25				2	5A	20†		125†
2SB332	HIT	PNP	25				2	5A	20†		125†
2SB333	HIT	PNP	25				2	5A	25†		100†
2SB334	HIT	PNP	25				2	5A	25†		50†
2SB337	HIT	PNP	16				4	1A		75†	
2SB338	HIT	PNP	16				4	1A		75†	
2SB339	HIT	PNP	16				4	1A	40†		175†
2SB340	HIT	PNP	16				1	8A	20†		80†
2SB341	HIT	PNP	16				1	8A	20†		80†
2SB361	HIT	PNP	16				2	1A		14†	
2SB362	HIT	PNP	16				2	1A		18†	
2SB364	TOS		13				1	20		80†	
2SB367	HIT	PNP	16				1.5	500		60†	
2SB368	HIT	PNP	16				1.5	500		110†	
2SB370	HIT	PNP	13				1	150		100†	
2SB370A	HIT	PNP	13				1	150		100	
2SB400	SEC	PNP	13				6	1		100	
2SB403	MAT	PNP	17				0.5	300		50†	
2SB3041	SO	PNP									
2SB3042	SO	PNP									
2SB3043	SO	PNP									
2SC11	NEC TOS	NPN	13				6	1	22†	44†	150†
2SC12	TOS	NPN	13				10	200		20	
2SC13	TOS	NPN	13				1	24	20†	50†	
2SC14	TOS	NPN	13				1	24	20†	100†	
2SC15	SO	NPN	13				5	10	7†	30†	240†
2SC15-0	SO	NPN	13				5	10	7†	30†	240†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
1.5	0.5	5	40	5A	54.0W†		2SB251A
			50	5A	54.0W†		2SB252
			80	5A	54.0W†		2SB252A
			50	5A	54.0W†		2SB253
			80	5A	54.0W†		2SB253A
				5	60		2SB257
				15A	60.0W†		2SB258
				15A	60.0W†		2SB259
				15A	60.0W†		2SB260
				50	70		2SB264
			40	100	170		2SB265
			80	6A	12.0W†		2SB274
			105	6A	12.0W†		2SB275
			105	10A	12.0W†		2SB276
			25	150	150		2SB292
6	1	3.5	10	2	40		2SB302
				20	50		2SB303
				50	40		2SB322
				500	225		2SB326
				500	225		2SB327
				300	150		2SB328
				300	150		2SB329
				150	225		2SB330
			25	15A	80.0W†		2SB331
			45	15A	80.0W†		2SB332
			55	15A	80.0W†		2SB333
			65	15A	80.0W†		2SB334
			40	7A	12.0W†		2SB337
			60	7A	12.0W†		2SB338
			35	10A	12.0W†		2SB339
80			40	10A	12.0W†		2SB340
			50	10A	12.0W†		2SB341
			80	5A	12.0W†		2SB361
			100	5A	12.0W†		2SB362
				300	150		2SB364
			25	1A	4.0W†		2SB367
			45	1A	4.0W†		2SB368
			25	500	200		2SB370
			32	500	200		2SB370A
				40	100		2SB400
			32	300	240		2SB403
				1A	10.0W†		2SB3041
				1A	10.0W†		2SB3042
				2	15		2SB3043
			18	24	50		2SC11
				250	700		2SC12
			18	40	65		2SC13
			18	40	65		2SC14
			30	50	750		2SC15
			30	50	750		2SC15-0

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{CO}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2SC15-1	SO	NPN	13				5	10	7†	30†	240†
2SC15-2	SO	NPN	13				5	10	7†	30†	240†
2SC15-3	SO	NPN	13				5	10	7†	30†	240†
2SC16	TOS	NPN	17				1	10	15†	25†	
2SC17	TOS	NPN	17				10	10		32	
2SC18	TOS	NPN	13				0.3	10	80†		
2SC19	TOS	NPN	13				10	15	15†	50†	
2SC20	TOS	NPN	13				10	10	49		
2SC21	TOS	NPN	16				10	1A		25†	
2SC22	NEC	NPN	13				10	150	20†	50†	100†
2SC23	NEC	NPN	13				10	150	20†	50†	100†
2SC24	NEC	NPN	13				10	150	20†	50†	100†
2SC30	NEC	NPN	13				10	10	20	45	100
2SC31	NEC	NPN	13				10	10		35	
2SC32	NEC	NPN	13				10	10		65	
2SC33	NEC	NPN	9				10	5	25	55	125
2SC37	NEC	NPN	13				10	10	20	50	100
2SC38	NEC	NPN	13				10	10	20	50	200
2SC41	SO	NPN	13				10	1A	12†	28†	92†
2SC42	SO	NPN	13				10	1A	4†	28†	185†
2SC43	SO	NPN	13				10	1A	4†	28†	185†
2SC44	SO	NPN	13				10	1A	4†	28†	185†
2SC49	NEC	NPN	13				10	150	40	60	120
2SC59	NEC	NPN	13				10	150	20	35	120
2SC62	HIT	NPN	17								
2SC63	NEC	NPN	13				1	10	20†	40†	
2SC73	SO	NPN	1				6	1	26	41	82
2SC74	TOS	NPN	13				6	2	10	80	150
2SC75	SO	NPN	1				6	1	9	24	82
2SC76	SO	NPN	1				6	1	9	24	82
2SC77	SO	NPN	1				6	1	9	24	82
2SC78	SO	NPN	1				6	1	32	49	66
2SC89	HIT	NPN	17				0.3	200	20†	40†	100†
2SC90	TOS	NPN	17	15		600nA	0.3	200	20†	120†	
2SC91	HIT	NPN	17				0.3	200	20†	220†	
2SC103	TOS	NPN	17				1	10		35	
2SC104	TOS	NPN	17				10	10		2.5	
2SC112	HIT	NPN	31				2	200	35†		125†
2SC113	HIT	NPN	31				2	200	35†		125†
2SC116	HIT	NPN	17				6	10		3.5	
2SC117	HIT	NPN	13				15	30	10†		
2SC118	HIT	NPN	13				15	30		10	
2SC119	HIT	NPN	13				15	30		10	
2SC121	NEC	NPN	13				9	1	20	40	75
2SC122	NEC	NPN	13				9	1	50	90	150
2SC123	NEC	NPN	13				9	1	80	140	200
2SC124	NEC	NPN	13				1	50 μA	20†	40†	60†
2SC149	NEC	NPN	13				10	150	15	45	
2SC150	HIT	NPN	17				6	10		50	
2SC151	HIT	NPN	17				6	10		50	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			30	50	750		2SC15-1
			30	50	750		2SC15-2
			30	50	750		2SC15-3
			20	30	200		2SC16
				30	200		2SC17
				30	200		2SC18
			30	400	600		2SC19
				400	600		2SC20
			60	2A	60.0W†		2SC21
			50	600	2.0W		2SC22
			50	500	2.0W		2SC23
				500	13.0W†		2SC24
				80	500		2SC30
				80	500		2SC31
				80	500		2SC32
				50	150		2SC33
			25	80	200		2SC37
			25	80	500		2SC38
				5A	50.0W†		2SC41
				5A	50.0W†		2SC42
				5A	50.0W†		2SC43
				5A	50.0W†		2SC44
				300	800		2SC49
				300	800		2SC59
			15	50	360		2SC62
				50	300		2SC63
			15	5	30		2SC73
				100	300		2SC74
			15	5	30		2SC75
			15	5	30		2SC76
			15	5	30		2SC77
			15	5	30		2SC78
					120		2SC89
				400	120		2SC90
				400	120		2SC91
				50	200		2SC103
				50	200		2SC104
			20	200	750		2SC112
			25	200	750		2SC113
			50	200	750		2SC116
			50	600	2.0W		2SC117
			80	600	2.0W		2SC118
			75	600	2.0W		2SC119
				25	250		2SC121
				25	250		2SC122
				25	250		2SC123
				25	250		2SC124
				30	800		2SC149
			20	100	750		2SC150
			40	100	750		2SC151

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
2SC152	HIT	NPN	17				6	10		50	
2SC153	HIT	NPN	17								
2SC154	HIT	NPN	17								
2SC166	HIT	NPN	17				12	3	30†		180†
2SC167	HIT	NPN	17				12	3	50†		100†
2SC173	SO	NPN	13				6	1		41	
2SC175	SO	NPN	13				6	1		24	
2SC176	SO	NPN	13				6	1		24	
2SC177	SO	NPN	13				6	1		24	
2SC178	SO	NPN	13				6	1		49	
2SC179	HIT	NPN	13				0.2	20	20†		100†
2SC180	HIT	NPN	13				0.3	200	20†		120†
2SC181	HIT	NPN	13				0.3	200	20†		220†
2SC191	SO	NPN	16				20	1	9	21	166
2SC192	SO	NPN	16				20	1	9	21	166
2SC193	SO	NPN	16				20	1	9	21	166
2SC194	SO	NPN	16				20	1	9	21	166
2SC195	SO	NPN	16				20	1	9	21	166
2SC196	SO	NPN	16				20	1	9	21	166
2SC197	SO	NPN	16				20	1	9	21	166
2SD11	NEC	NPN	13				1	20	25†	70†	300†
2SD19	NEC	NPN	13				1	20	19	31	42
2SD20	NEC	NPN	13				1	20	34	50	65
2SD21	NEC	NPN	13				1	20	53	72	90
2SD22	NEC	NPN	17				1	20	72	97	121
2SD23	NEC	NPN	13				1	20	99	150	300
2SD43	TOS	NPN	13				1	50	40	70	110
2SD44	TOS	NPN	13				6	1	45	85	150
2SD61	SO	NPN	1				6	1	32	42	55
2SD62	SO	NPN	1				6	1	32	42	55
2SD63	SO	NPN	1				1		29	50	78
2SD64	SO	NPN	1				6	1	46	76	142
2SD65	SO	NPN	1				6	1	25	43	70
2SD66	SO	NPN	1				6	1	14	23	39
2SD75	HIT	NPN	13				6	1	40		
2SD75A	HIT	NPN	13				6	1		40	
2SD77	HIT	NPN	13				1.5	50		85	
2SD77A	HIT	NPN	13				1.5	50		85	
2SD120	HIT	NPN	17				4	200	15†		100†
2SD121	HIT	NPN	17				4	200	15†		100†
2SD122	HIT	NPN	13				4	750	15†		100†
2SD123	HIT	NPN	13				4	750	15†		100†
2SD124	HIT	NPN	16				4	1.5A	10†		75†
2SD125	HIT	NPN	16				4	1.5A	10†		75†
2SH13	TOS	PNP	17								
2SH14	TOS	PNP	17								
2ST50	SC	NPN	102				1	10	30†	55†	120†
2ST53	SC	NPN	102				1	10	40†		160†
2T64	SO	NPN	1				6	1	46	76	142
2T65	SO	NPN	1				6	1	25	43	70

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			60	100	750		2SC152
			120	100	750		2SC153
			120	100	750		2SC154
			30	30	200		2SC166
			45	30	200		2SC167
				5	30		2SC173
				5	30		2SC175
				5	30		2SC176
				5	30		2SC177
				5	30		2SC178
			15	200	120		2SC179
			15	400	120		2SC180
			12	400	120		2SC181
				10A	250		2SC191
				10A	250		2SC192
				10A	250		2SC193
				10A	250		2SC194
				10A	250		2SC195
				10A	250		2SC196
				10A	250		2SC197
6	1	7		300	125		2SD11
				300	150		2SD19
				300	150		2SD20
				300	150		2SD21
				300	150		2SD22
				300	150		2SD23
				50	110		2SD43
				50	80		2SD44
6	1	5	12	100	100		2SD61
6	1		12	100	100		2SD62
			20	100	100		2SD63
6	1	8	20	50	50		2SD64
6	1	8	20	50	80		2SD65
6	1	8	20	50	80		2SD66
				70	100		2SD75
6	1	6	45	100	150		2SD75A
				70	100		2SD77
			45	100	150		2SD77A
			40	1.5A	1.0W		2SD120
			60	3A	7.0W†		2SD121
			55	1.5A	1.0W		2SD121
			40	3A	7.0W†		2SD122
			55	3A	7.0W†		2SD123
			40	6A	21.0W†		2SD124
			55	6A	21.0W†		2SD125
							2SH13
							2SH14
			12		300		2ST50
			12		300		2ST53
6	1	8	20	50	80		2T64
6	1	8	20	50	50		2T65

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{CO}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
2T66	SO	NPN	1				6	1	14	23	39
2T67	SO	NPN	1				6	1		13	
2T69	SO	NPN	1				1	10	29†	50†	78†
2T71	SO	NPN					6	1		49	
2T72	SO	NPN					6	1		32	
2T73	SO	NPN	1				6	1	26	41	82
2T75	SO	NPN	1				6	1	9	24	82
2T76	SO	NPN	1				6	1	9	24	82
2T77	SO	NPN	1				6	1	9	24	82
2T78	SO	NPN	1				6	1	32	49	66
2T85	SO	NPN	1				1	20		57†	
2T201	SO	PNP	1				6	1	9	24	82
2T203	SO	PNP	1				6	1	14	32	82
2T204	SO	PNP					6	1		49	
2T205	SO	PNP					6	1		49	
2T205A	SO	PNP	1				6	1	32	49	66
2T311	SO	PNP	13				6	1	31	36	62
2T312	SO	PNP	13				6	1	21	36	62
2T313	SO	PNP	13				6	1	38	66	110
2T314	SO	PNP	13				6	1	38	66	110
2T315	SO	PNP	13				6	1	66	99	142
2T321	SP	PNP	13				6	1	21	36	62
2T322	SO	PNP	13				6	1	21	36	62
2T323	SO	PNP	13				6	1	38	66	110
2T324	SO	PNP	13				6	1	38	66	110
2T383	SO	PNP	13				6	1	41	55	66
2T681	SO	NPN	1				6	1	32	42	55
2T682	SO	NPN	1				6	1	32	42	55
2T3011	SO	PNP	13				1.5	1A	49†	70†	103†
2T3021	SO	PNP	13				1.5	1A	49†	70†	103†
2T3030	SO	PNP	16				1.5	1A	12†	24†	31†
2T3031	SO	PNP	16				1.5	1A	20†	32†	47†
2T3032	SO	PNP	16				1.5	1A	32†	50†	75†
2T3033	SO	PNP	16				1.5	1A	51†	80†	121†
2T3041	SO	PNP	16				1.5	1A	20†	32†	47†
2T3042	SO	PNP	16				1.5	1A	32†	50†	75†
2T3043	SO	PNP	16				1.5	1A	51†	80†	121†
2V205	SGS	PNP	102								
3N71	SP	NPN	128				2	2	40†		
3N72	SP	NPN	128				2	2	40†		
3N73	SP	NPN	128				2	2	40†		
3N74	TIL	NPN	100								
3N75	TIL	NPN	100								
3N76	TIL	NPN	100								
3N77	TIL	NPN	100								
3N78	TIL	NPN	100								
3N79	TIL	NPN	100								
3N87	SGS	NPN	100								
3N88	SGS	NPN	100								
3N90	CRY	PNP	109								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
6	1	8	20	50	80		2T66
				20	80		2T67
				100	100		2T69
				10	50		2T71
				10	50		2T72
			15	5	50		2T73
			15	5	30		2T75
			15	5	50		2T76
			15	5	30		2T77
				5	30		2T78
				200	200		2T85
			15	2	15		2T201
			15	2	15		2T203
				5	30		2T204
				5	30		2T205
			15	2	15		2T205A
6	1	6	16	100	140		2T311
6	1	6	16	100	140		2T312
6	1	6	16	100	140		2T313
6	1	6	16	100	140		2T314
							2T315
6	1	6	16	100	140		2T321
6	1	6	20	200	200		2T322
6	1	6	20	200	200		2T323
6	1	6	20	200	200		2T324
							2T383
6	1	6	20	200	200		2T681
6	1	5	12	100	100		2T682
			12	100	100		2T3011
			20	1.5A	12.0W†		2N3021
			40	1.5A	12.0W†		
			30	1A	10.0W†		2T3030
			30	1A	10.0W†		2T3031
			30	1A	10.0W†		2T3032
			30	1A	10.0W†		2T3033
			30	1A	10.0W†		2T3041
			30	1A	10.0W†		2T3042
			30	1A	10.0W†		2T3043
5	50μA	4.5	10		250		2V205
				10	100		3N71
				10	100		3N72
				10	100		3N73
			18	20	300		3N74
			18	20	300		3N75
			18	20	300		3N76
			12	20	300		3N77
			12	20	300		3N78
			12	20	300		3N79
			10	10	200		3N87
			10	10	200		3N88
			30		300		3N90

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
3N91	CRY	PNP	109								
3N92	CRY	PNP	109								
3N93	CRY	PNP	109								
3N94	CRY	PNP	109								
3N95	CRY	PNP	109								
3N100	CRY	PNP	109								
3N101	CRY	PNP	109								
3N102	CRY	PNP	109								
3N103	CRY	PNP	109								
3N104	CRY	PNP	109								
3N105	CRY	PNP	109								
3N106	CRY	PNP	109								
3N107	CRY	PNP	109								
3N108	TIL TII	PNP	100								
3N109	TIL TII	PNP	100								
3N110	TIL TII	PNP	100								
3N111	TIL TII	PNP	100								
3NU72	TES	PNP	16					1.5A	10†		
3NU73	TES	PNP	16					3A	10†		
3NU74	TES	PNP	16					10A	50†		130†
3TE130	CLE	NPN	16								
3TE140	CLE	NPN	16								
3TE150	CLE	NPN	57				5	200	10†		80†
3TE160	CLE	NPN	17				5	200	10†		80†
3TE240	CLE	NPN	111				5	500	10†		60†
3TX002	BC	NPN	16				5	1A	40†		
3TX003	BC	NPN	16				5	1A	15†		
3TX004	BC	NPN	16				5	1A	15†		
4C28	GE	NPN	13				5	1	9	15	22
4C29	GE	NPN	13				5	1	18	30	44
4C30	GE	NPN	13				5	1	37	55	90
4C31	GE	NPN	13				5	1	76	115	333
4D20	GE	NPN	17								
4D21	GE	NPN	17								
4D22	GE	NPN	17								
4D24	GE	NPN	17								
4D25	GE	NPN	17								
4D26	GE	NPN	17								
4JD1A17	GE	PNP									
4JD1A73	GE	PNP									
4JD1B2	GE	PNP									
4JD1B3	GE	PNP									
4JD12X013	GE	NPN									
4JD12X043	GE	NPN	102			10	10	30			
4JD12X047	GE	NPN	102								
4JD12X070	GE	NPN									
4JD12X084A	GE	NPN									
4JD12X165	GE	NPN					10	200†		600†	
4NU72	TES	PNP	16					1.5A	10†		
4NU73	TES	PNP	16					3A	10†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			30		300		3N91
			30		300		3N92
			50		300		3N93
			50		300		3N94
			50		300		3N95
			10		300		3N100
			20		300		3N101
			30		300		3N102
			40		300		3N103
			50		300		3N104
			15		300		3N105
			30		300		3N106
			50		300		3N107
			50	20	300		3N108
			50	20	300		3N109
			30	20	300		3N110
			30	20	300		3N111
			32	1.5A	4.0W		3NU72
			32	3.5A	12.5W		3NU73
			32	15A	50.0W†		3NU74
				5A	60.0W†		3TE130
				1.5A	20.0W†		3TE140
				600	7.5W†		3TE150
				600	800		3TE160
				3A	25.0W†		3TE240
				5A	60.0W†		3TX002
				5A	45.0W†		3TX003
				5A	45.0W†		3TX004
			30	25	150		4C28
			30	25	150		4C29
			30	25	150		4C30
			30	25	150		4C31
				60	600		4C43
			24	25	150		4D20
			24	25	150		4D21
			24	25	150		4D22
			15	25	125		4D24
			15	25	125		4D25
			15	25	125		4D26
				50	150		4JD1A17
				50	100		4JD1A73
				1A	200		4JD1B2
				1A	200		4JD1B3
			7		300		4JK12X013
			50	1A	800		4JD12X043
			25	1A	600		4JD12X047
			7		300		4JD12X070
			15		360		4JD12X084A
			45				4JD12X165
			48	1.5A	4.0W		4NU72
			48	3.5A	12.5W		4NU73

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
4NU74	TES	PNP	16					10A	20†		60†
5NU72	TES	PNP	16					1.5A	10†		
5NU73	TES	PNP	16					3A	10†		
5NU74	TES	PNP	16					10A	50†		130†
6NU73	TES	PNP	16					3A	10†		
6NU74	TES	PNP	16					10A	50†		130†
7A30	GE	NPN	17								
7A31	GE	NPN	17								
7A32	GE	NPN	17								
7A35	GE	NPN	17								
7B1	GE	NPN	103				30	30	12		
7B2	GE	NPN	103				30	30	30		
7B3	GE	NPN	103				30	30	12		
7B13	GE	NPN	103				10	200	75†		200†
7B33	GE	NPN	103								
7B34	GE	NPN	103								
7C1	GE	NPN	121				30	30	12		
7C2	GE	NPN	121				30	30	30		
7C3	GE	NPN	121				30	30	12		
7C13	GE	NPN	121				10	200	75†		200†
7D1	GE	NPN	17				30	30	12		
7D2	GE	NPN	17				30	30	30		
7D3	GE	NPN	17				30	30	12		
7D13	GE	NPN	17				10	200	75†		200†
7D33	GE	NPN	17								
7D34	GE	NPN	17								
7E1	GE	NPN	110				30	30	12		
7E2	GE	NPN	110				30	30	30		
7E3	GE	NPN	110				30	30	12		
7E13	GE	NPN	110				10	200	75†		200†
7F1	GE	NPN	73				30	30	12		
7F2	GE	NPN	73				30	30	30		
7F3	GE	NPN	73				30	30	12		
7F4	GE	NPN	73				30	30	30		
7F13	GE	NPN	73				10	200	75†		200†
7G1	GE	NPN	73				30	30	12		
7G2	GE	NPN	73				30	30	30		
7G3	GE	NPN	73				30	30	12		
7G4	GE	NPN	73				30	30	30		
7G13	GE	NPN	73				10	200	75†		200†
7G33	GE	NPN	73								
7G34	GE	NPN	73								
7NU73	TES	PNP	16					3A	50†		
7NU74	TES	PNP	16					10A	50†		130†
9B	NOR	PNP	90				1	150		25	
9BLY	MULL	NPN	25								
9D	NOR	PNP	90				15	45	40		150
10B551-2	GE	NPN	114								
10B551-3	GE	NPN	115								
10B553-2	GE	NPN	114								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			48	15A	50.0W†		4NU74
			60	1.5A	4.0W†		5NU72
			60	3.5A	12.5W†		5NU73
			48	15A	50.0W†		5NU74
			70	3.5A	12.5W†		6NU73
			70	15A	50.0W†		6NU74
			40		1.0W		7A30
			30		1.0W		7A31
			30		1.0W		7A32
			30		1.0W		7A35
			60		2.0W		7B1
			60		2.0W		7B2
			100		2.0W		7B3
			60		2.0W		7B13
			60		2.0W		7B33
					2.0W		7B34
			60	75	1.0W		7C1
			60	80	1.0W		7C2
			100	75	1.0W		7C3
			60		1.0W		7C13
			60	75	1.0W		7D1
			60	80	1.0W		7D2
			100	75	1.0W		7D3
			60		1.0W		7D13
					1.0W		7D33
					1.0W		7D34
			60		1.0W		7E1
			60		1.0W		7E2
			100		1.0W		7E3
			60		1.0W		7E13
			60		1.0W		7F1
			60		1.0W		7F2
			100		1.0W		7F3
			100		1.0W		7F4
			60		1.0W		7F13
			60		1.5W		7G1
			60		1.5W		7G2
			100		1.5W		7G3
			100		1.5W		7G4
			60		1.5W		7G13
			200		10.0W†		7G33
			200		10.0W†		7G34
			80	3.5A	12.5W†		7NU73
			70	15A	50.0W†		7NU74
					2.8W†		9B
			80	10A	100.0W†		9BLY
					2.8W†		9D
			15		100		10B551-2
			15		100		10B551-3
			15		100		10B553-2

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
10B553-3	GE	NPN	115								
10B555-2	GE	NPN	114								
10B555-3	GE	NPN	115								
10B556-2	GE	NPN	114								
10B556-3	GE	NPN	115								
10C573-2	GE	NPN	114				5	1	36		90
10C573-3	GE	NPN	115				5	1	36		90
10C574-2	GE	NPN	114				5	1	76		333
10C574-3	GE	NPN	115				5	1	76		333
10H551-2	GE	NPN	114				5	1	60		
10H551-3	GE	NPN	115				5	1	60		
10T2	TH	NPN	17				5	1		20	
11B551-2	GE	NPN	114								
11B551-3	GE	NPN	115								
11B552-2	GE	NPN	114								
11B552-3	GE	NPN	115								
11B554-2	GE	NPN	114				10	1	30†		
11B554-3	GE	NPN	115				10	1	30†		
11B555-2	GE	NPN	114				10	1	75†		
11B555-3	GE	NPN	115				10	1	75†		
11B556-2	GE	NPN	114				10	1	30†		
11B556-3	GE	NPN	115				10	1	30†		
11B560-2	GE	NPN	114								
11B560-3	GE	NPN	115								
11C1B1	GE	NPN	103				10	10	75†		
11C1F1	GE	NPN	73				10	10	75†		
11C3B1	GE	NPN	103				10	10	30†		
11C3F1	GE	NPN	73				10	10	30†		
11C5B1	GE	NPN	103				10	10	15†		
11C5F1	GE	NPN	73				10	10	15†		
11C7B1	GE	NPN	103								
11C7F1	GE	NPN	103								
11C10B1	GE	NPN	103				10	10	30†		
11C10F1	GE	NPN	73				10	10	30†		
11C11B1	GE	NPN	103				10	10	30†		
11C11F1	GE	NPN	73				10	10	30†		
11C201B20	GE	NPN	103				10	10	75†		
11C203B20	GE	NPN	103								
11C205B20	GE	NPN	103				10	10	15†		
11C207B20	GE	NPN	103								
11C208B20	GE	NPN	103								
11C210B20	GE	NPN	103				10	10	30		
11C211B20	GE	NPN	103				10	10	30†		
11C551-2	GE	NPN	114				10	1	75†		
11C551-3	GE	NPN	115				10	1	75†		
11C553-2	GE	NPN	114				10	1	30†		
11C553-3	GE	NPN	115				10	1	30†		
11C557-2	GE	NPN	114								
11C557-3	GE	NPN	115								
11C702	GE	NPN	122				10	10	75†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			15		100		10B553-3
					100		10B555-2
					100		10B555-3
			15		100		10B556-2
			15		100		10B556-3
			45		100		10C573-2
			45		100		10C573-3
			45		100		10C574-2
			45		100		10C574-3
			45		100		10H551-2
			45		100		10H551-3
			30	25	125		10T2
			28		100		11B551-2
			28		100		11B551-3
			28		100		11B552-2
			28		100		11B552-3
10	0.3	12	28		100		11B554-2
10	0.3	12	28		100		11B554-3
10	0.3	12	28		100		11B555-2
10	0.3	12	28		100		11B555-3
			80		100		11B556-2
10	0.3	12	80		100		11B556-3
			60		100		11B560-2
			60		100		11B560-3
			40	1A	1.5W		11C1B1
			40	1A	1.1W		11C1F1
			50	1A	1.5W		11C3B1
			50	1A	1.1W		11C3F1
			40	1A	1.5W		11C5B1
			40	1A	1.1W		11C5F1
			24	1A	1.5W		11C7B1
			25	1A	1.1W		11C7F1
			80	1A	1.5W		11C10B1
			80	1A	1.1W		11C10F1
			40	1A	1.5W		11C11B1
			40	1A	1.1W		11C11F1
			40	1A	1.0W		11C201B20
			50	1A	1.0W		11C203B20
			40	1A	1.0W		11C205B20
			25	1A	1.0W		11C207B20
			50	1A	1.0W		11C208B20
			80	1A	1.0W		11C210B20
			40	1A	1.0W		11C211B20
			40		100		11C551-2
			40		100		11C551-3
			40		100		11C553-2
			40		100		11C553-3
			25		100		11C557-2
			25		100		11C557-3
			40				11C702

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
11C704	GE	NPN	122				10	10	30†		
11C710	GE	NPN	122				10	10	30†		
11T2	TH	NPN	17				5	1		40	
12A	NOR	PNP	13				5	1	13		199
12A8	GE	NPN	102				5	1	30†		
12B	NOR	PNP	13				5	1	49		199
12D	NOR	PNP	13				5	1	19		199
12E	NOR	PNP	13				5	1	19		199
12F	NOR	PNP	13				5	1	16		199
12G	NOR	PNP	13				5	1	49		199
12H	NOR	PNP	13				5	1	32		199
12T2	TH	NPN	17				5	1		70	
12X084A	GE	NPN	127								
12X084B	GE	NPN	127								
13K3	SP	NPN					2	2	40†		
16A	NOR	NPN	17				10	10	35		200
17T1	TH	PNP					15	20		100†	
18T1	TH	PNP					10	20		100†	
20A	NOR	NPN	13				20	15	35		150
23K3	SP	NPN					2	2	40†		
25T1	TH	PNP	13				5	3	20		
25T2	TH	NPN	13				10	10	20†		80†
26T1	TH	PNP	13				5	3	20		
26T2	TH	NPN	13				10	10	20†		80†
26T2C	TH	NPN	13				10	5		50	
28T2	TH	NPN	13				10	10	8†		20†
29T2	TH	NPN	13				10	10	8†		25†
29T2C	TH	NPN	13				10	10	8†		20†
30T2	TH	NPN	102				5	1	30†		
31T1	TH	PNP	13				4.5	1		80	
32T1	TH	PNP	13				4.5	1		40	
33K3	SP	NPN					2	2	40†		
33T1	TH	PNP	13				4.5	1		80	
34T1	TH	PNP	13				4.5	1		40	
35T1	TH	PNP	80					10	25†	30†	35†
36T1	TH	PNP	80					10	35†	60†	
37T1	TH	PNP	80				1	10	25		
38T1	TH	PNP									
39T1	TH	PNP									
44T1	TH	PNP	78				1	100		54†	
64T1	TH	PNP	17				1	10		84	
65T1	TH	PNP	17				1	10		90	
67BSY	MULL	PNP	17				0.35	10	20†		120†
70BLY	MULL	NPN	73				10	500	5†		
71T2	TH	NPN	103				2	1A	30†		90†
72T2	TH	NPN	103				1	1A	50†		90†
73T2	TH	NPN	103				10	200	30†		90†
74T2	TH	NPN	103				10	200	75†		200†
80T2	TH	NPN	13				2	40		25†	
81T1	TH	PNP	56				1	1A		30†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			50				11C704
			80				11C710
			30	25	125		11T2
					250		12A
			30		250		12A8
					250		12B
					250		12D
					250		12E
					250		12F
					250		12G
					250		12H
			30	25	125		12T2
			15	200	250		12X084A
			15	200	250		12X084B
			8	10	100		13K3
					300		16A
				500	550		17T1
				500	550		18T1
					2.6W		20A
			8	10	100		23K3
			11	10	30		25T1
				100	500		25T2
			11	10	30		26T1
			55	100	500		26T2
			55	100	2.5W		26T2C
				100	2.5W		28T2
			55	100	2.5W		29T2
			55	100	2.5W		29T2C
			30		250		30T20
			10	50	100		31T1
			10	50	100		32T1
			8	10	100		33K3
			15	50	100		33T1
			15	50	100		34T1
			14	50	100		35T1
			14	50	100		36T1
			10	50	100		37T1
			14	50	90		38T1
			10	50	90		39T1
			12	300	400		44T1
			20	200	150		64T1
			20	200	150		65T1
			13	100	250		67BSY
			80	1A	7.5W†		70BLY
					15.0W†		71T2
					15.0W†		72T2
					15.0W†		73T2
					15.0W†		74T2
					200		80T2
			12	300	400		81T1

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
82T1	TH	PNP	79				1	500		40†	
88BFY	MULL	NPN	17				10	10	20†		
90T2	TH	NPN	116								
94BLY	MULL	NPN	73				10	500	5†		
97BSY(A)	MULL	NPN	17				1	10	20†		60†
97BSY(B)	MULL	NPN	17				1	10	40†		120†
100T2	TH	NPN	16								
101A	MR	PNP	13	6		250					
101B	MR	PNP	13	6		250					
101M	MR	PNP	13	6		250					
101NU70	TES	NPN	1				5	1	5	12	
101NU71	TES	NPN	1	6	125 μ A	300 μ A	6	10	45	70	120
102NU70	TES	NPN	1				5	1	12	16	18
102NU71	TES	NPN	1				6	10	65	140	220
103NU70	TES	NPN	1				5	1	20		
104NU70	TES	NPN	1				4	1	20		
104NU71	TES	NPN	1	6	125 μ A	300 μ A	6	10	45	70	120
104T2	TH	NPN	16								
105NU70	TES	NPN	1	4.5	110 μ A	225 μ A	2	0.5	20	30	40
106NU70	TES	NPN	1	4.5	150 μ A	325 μ A	2	3	30	47	75
107NU70	TES	NPN	1	4.5	350 μ A	550 μ A	2	3	65	90	130
115UA	WES	NPN									
115UB	WES	NPN									
115UC	WES	NPN									
115UD	WES	NPN									
115WA	WES	NPN									
115WB	WES	NPN									
115WC	WES	NPN									
115WD	WES	NPN									
115XA	WES	NPN									
115XB	WES	NPN									
115XC	WES	NPN									
125UA	WES	NPN									
125UB	WES	NPN									
125UC	WES	NPN									
125UD	WES	NPN									
125WA	WES	NPN									
125WB	WES	NPN									
125WC	WES	NPN									
125WD	WES	NPN									
125XA	WES	NPN									
125XB	WES	NPN									
125XC	WES	NPN									
125XD	WES	NPN									
146T1	TH	PNP	16				5	1A		40	
147T1	TH	PNP	16				5	1A		40	
151-04	WES	NPN	67				4	500	26†		40†
151-05	WES	NPN	67				4	500	26†		40†
151-06	WES	NPN	67				4	500	26†		40†
151-07	WES	NPN	67				4	500	26†		40†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
			15	1.5A	1.2W		82T1
			60	1A	5.0W		88BFY
					200		90T2
			80	2A	17.5W†		94BLY
			15	500	360		97BSY(A)
			15	500	360		97BSY(B)
					85.0W†		100T2
			6	100	150		101A
			6	100	150		101B
			6	100	150		101M
			20	3	30		101NU70
2	0.5	10*		50	125		101NU71
			25	5	50		102NU70
				125	125		102NU71
			25	5	50		103NU70
			25	5	50		104NU70
2	0.5	10*		50	125		104NU71
					85.0W†		104T2
2	0.5	10*		10	125		105NU70
2	0.5	10*		10	125		106NU70
				10	125		107NU70
2	0.5	10*		30A	250.0W†		115UA
			100	38	250.0W†		115UB
			150	30A	250.0W†		115UC
			200	30A	250.0W†		115UD
			50	30A	250.0W†		115WA
			100	30A	250.0W†		115WB
			150	30A	250.0W†		115WC
			200	30A	250.0W†		115WD
			50	30A	250.0W†		115XA
			100	30A	250.0W†		115XB
			150	30A	250.0W†		115XC
			50	30A	250.0W†		125UA
			100	30A	250.0W†		125UB
			150	30A	250.0W†		125UC
			200	30A	250.0W†		125UD
			50	30A	250.0W†		125WA
			100	30A	250.0W†		125WB
			150	30A	250.0W†		125WC
			200	30A	250.0W†		125WD
			50	30A	250.0W†		125XA
			100	30A	250.0W†		125XB
			150	30A	250.0W†		125XC
			200	30A	250.0W†		125XD
					30.0W†		146T1
					30.0W†		147T1
			40	6A	100.0W†		151-04
			50	6A	100.0W†		151-05
			60	6A	100.0W†		151-06
			70	6A	100.0W†		151-07

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
151-08	WES	NPN	67				4	500	26†		40†
151-09	WES	NPN	67				4	500	26†		40†
151-10	WES	NPN	67				4	500	26†		40†
151-12	WES	NPN	67				4	1.5A	11†		
151-14	WES	NPN	67				4	1.5A	11†		
151-16	WES	NPN	67				4	1.5A	11†		
151-18	WES	NPN	67				4	1.5A	11†		
151-20	WES	NPN	67				4	1.5A	11†		
151-22	WES	NPN	67				4	1.5A	11†		
151-24	WES	NPN	67				4	1.5A	11†		
152-04	WES	NPN	67				4	500	26†		40†
152-05	WES	NPN	67				4	500	26†		40†
152-06	WES	NPN	67				4	500	26†		40†
152-07	WES	NPN	67				4	500	26†		40†
152-08	WES	NPN	67				4	500	26†		40†
152-09	WES	NPN	67				4	500	26†		40†
152-10	WES	NPN	67				4	1.5A	18†		40†
152-12	WES	NPN	67				4	1.5A	18†		
152-14	WES	NPN	67				4	1.5A	18†		
152-16	WES	NPN	67				4	1.5A	18†		
152-18	WES	NPN	67				4	1.5A	18†		
152-20	WES	NPN	67				4	1.5A	18†		
152-22	WES	NPN	67				4	1.5A	18†		
152-24	WES	NPN	67				4	1.5A	18†		
152NU70	TES	NPN	1				5	0.5	20		100
153-04	WES	NPN	123				4	1.5A	15†		
153-05	WES	NPN	123				4	1.5A	15†		
153-06	WES	NPN	123				4	1.5A	15†		
153-07	WES	NPN	123				4	1.5A	15†		
153-08	WES	NPN	123				4	1.5A	15†		
153-09	WES	NPN	123				4	1.5A	15†		
153-10	WES	NPN	123				4	1.5A	15†		
153-12	WES	NPN	123				4	1.5A	15†		
153-14	WES	NPN	123				4	1.5A	15†		
153-16	WES	NPN	123				4	1.5A	15†		
153-18	WES	NPN	123				4	1.5A	15†		
153-20	WES	NPN	123				4	1.5A	15†		
153NU70	TES	NPN	1				5	0.5	10		40
154-04	WES	NPN	123				4	1.5A	25†		
154-05	WES	NPN	123				4	1.5A	25†		
154-06	WES	NPN	123				4	1.5A	25†		
154-07	WES	NPN	123				4	1.5A	25†		
154-08	WES	NPN	123				4	1.5A	25†		
154-09	WES	NPN	123				4	1.5A	25†		
154-10	WES	NPN	123				4	1.5A	25†		
154-12	WES	NPN	123				4	1.5A	25†		
154-14	WES	NPN	123				4	1.5A	25†		
154-16	WES	NPN	123				4	1.5A	25†		
154-18	WES	NPN	123				4	1.5A	25†		
154-20	WES	NPN	123				4	1.5A	25†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	0.5	10*	80	6A	100.0W†		151-08
			90	6A	100.0W†		151-09
			100	6A	100.0W†		151-10
			120	6A	100.0W†		151-12
			140	6A	100.0W†		151-14
			160	6A	100.0W†		151-16
			180	6A	100.0W†		151-18
			200	6A	100.0W†		151-20
			220	6A	100.0W†		151-22
			240	6A	100.0W†		151-24
			40	6A	100.0W†		152-04
			50	6A	100.0W†		152-05
			60	6A	100.0W†		152-06
			70	6A	100.0W†		152-07
			80	6A	100.0W†		152-08
			90	6A	100.0W†		152-09
			100	6A	100.0W†		152-10
			120	6A	100.0W†		152-12
			140	6A	100.0W†		152-14
			160	6A	100.0W†		152-16
			180	6A	100.0W†		152-18
			200	6A	100.0W†		152-20
			220	6A	100.0W†		152-22
			240	6A	100.0W†		152-24
			6	5	50		152NU70
5	0.5	20*	40	7.5A	200.0W†		153-04
			50	7.5A	200.0W†		153-05
			60	7.5A	200.0W†		153-06
			70	7.5A	200.0W†		153-07
			80	7.5A	200.0W†		153-08
			90	7.5A	200.0W†		153-09
			100	7.5A	200.0W†		153-10
			120	7.5A	200.0W†		153-12
			140	7.5A	200.0W†		153-14
			160	7.5A	200.0W†		153-16
			180	7.5A	200.0W†		153-18
			200	7.5A	200.0W†		153-20
			6	5	50		153NU70
			7.5A	7.5A	200.0W†		154-04
			50	7.5A	200.0W†		154-05
			60	7.5A	200.0W†		154-06
			70	7.5A	200.0W†		154-07
			80	7.5A	200.0W†		154-08
			90	7.5A	200.0W†		154-09
			100	7.5A	200.0W†		154-10
			120	7.5A	200.0W†		154-12
			140	7.5A	200.0W†		154-14
			160	7.5A	200.0W†		154-16
			180	7.5A	200.0W†		154-18
			200	7.5A	200.0W†		154-20

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
154NU70	TES	NPN	1				5	0.5	20		100
154T1	TH	PNP	17					1		30	
155NU70	TES	NPN	1	2	12 μA	40 μA	6	1	25	50	125
155T1	TH	PNP	17					1		40	
156NU70	TES	NPN	1	2	25 μA	75 μA	6	1	45	100	225
156T1	TH	PNP	17					1		50	
157T1	CDC TH	PNP	9				6	1	15	50	
159T1	TH	PNP	17					1		50	
160T1	TH	PNP	13				9	2	15†		
161 T1	CDC	PNP	13				9	2	15†		
161 T2	TH	NPN	116				1	10	30†		
162T1	TH	PNP	13				9	2	15†		
163-04	WES	NPN	35				4	1A		45†	
163-05	WES	NPN	35				4	1A		45†	
163-06	WES	NPN	35				4	1A		45†	
163-07	WES	NPN	35				4	1A		45†	
163-08	WES	NPN	35				4	1A		45†	
163-09	WES	NPN	35				4	1A		45†	
163-10	WES	NPN	35				4	1A		45†	
163-12	WES	NPN	35				4	1A		45†	
163-14	WES	NPN	35				4	1A		45†	
163-16	WES	NPN	35				4	1A		45†	
163-18	WES	NPN	35				4	1A		45†	
163-20	WES	NPN	35				4	1A		45†	
164-04	WES	NPN	35				4	2A		80†	
164-05	WES	NPN	35				4	2A		80†	
164-06	WES	NPN	35				4	2A		80†	
164-07	WES	NPN	35				4	2A		80†	
164-08	WES	NPN	35				4	2A		80†	
164-09	WES	NPN	35				4	2A		80†	
164-10	WES	NPN	35				4	2A		80†	
164-12	WES	NPN	35				4	2A		80†	
164-14	WES	NPN	35				4	2A		80†	
164-16	WES	NPN	35				4	2A		80†	
164-18	WES	NPN	35				4	2A		80†	
164-20	WES	NPN	35				4	2A		80†	
180T2A	TH	NPN	16								
180T2B	TH	NPN	16								
180T2C	TH	NPN	16								
181T2A	TH	NPN	16								
181T2B	TH	NPN	16								
181T2C	TH	NPN	16								
182T2A	TH	NPN	16								
182T2B	TH	NPN	16								
182T2C	TH	NPN	16								
183T2A	TH	NPN	16								
183T2B	TH	NPN	16								
183T2C	TH	NPN	16								
184T2A	TH	NPN	16								
184T2B	TH	NPN	16								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	0.5	20*	6	5	50		154NU70
			9	5	30		154T1
				5	83		155NU70
			9	5	30		155T1
				5	83		156NU70
			9	5	30		156T1
			9	5	30		157T1
			9	10	30		159T1
			14	10	80		160T1
				10	80		161T1
			14	200	200		161T2
			14	10	80		162T1
			40	20A	200.0W†		163-04
			50	20A	200.0W†		163-05
			60	20A	200.0W†		163-06
			70	20A	200.0W†		163-07
			80	20A	200.0W†		163-08
			90	20A	200.0W†		163-09
			100	20A	200.0W†		163-10
			120	20A	200.0W†		163-12
			140	20A	200.0W†		163-14
			160	20A	200.0W†		163-16
			180	20A	200.0W†		163-18
			200	20A	200.0W†		163-20
			40	20A	200.0W†		164-04
			50	20A	200.0W†		164-05
			60	20A	200.0W†		164-06
			70	20A	200.0W†		164-07
			80	20A	200.0W†		164-08
			90	20A	200.0W†		164-09
			100	20A	200.0W†		164-10
			120	20A	200.0W†		164-12
			140	20A	200.0W†		164-14
			160	20A	200.0W†		164-16
			180	20A	200.0W†		164-18
			200	20A	200.0W†		164-20
			60		80.0W†		180T2A
			60		80.0W†		180T2B
			60		80.0W†		180T2C
			100		80.0W†		181T2A
			100		80.0W†		181T2B
			100		80.0W†		181T2C
			200		80.0W†		182T2A
			200		80.0W†		182T2B
			200		80.0W†		182T2C
			300		80.0		183T2A
			300		80.0W†		183T2B
			300		80.0W†		183T2C
			400		80.0W†		184T2A
			400		80.0W†		184T2B

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
184T2C	TH	NPN	16								
185T2A	TH	NPN	16								
185T2B	TH	NPN	16								
185T2C	TH	NPN	16								
200A	TII	NPN	5				5	1	9	12	19
201A	MR	PNP	17	6		250 μ A	5	1.5	45		
201B	MR	PNP	17	6		250 μ A	5	1.5	45		
201M	MR	PNP	17	6		250 μ A	5	1.5	45		
202A	TII	NPN	5				5	1	45	65	
204A	TII										
300	TII	PNP	5				5	1	9	15	19
301	TII	PNP	5				1	19	36	49	
302	TII	PNP	5				5	1	49	55	
310	TII	PNP	5								
320	TII	PNP					5	1	65	125	195
322T1	TH	PNP	13				1	5	25		
326T1	CDC	PNP	13					5	140		
355	TII	PNP	46					500	40†		
474	TII	NPN	13				5	1	60		
501T1	TH	PNP	9				9	2	30†		
503T1	TH	PNP	9				9	2	15†		35†
504T1	TH	PNP	9				9	2	100		
505T1	GE TH	PNP	9				9	2	30†		
508T1	GE TH	PNP	9				9	2	15†		
703B	GE	NPN	17	30		250 μ A	5	1	37		90
800	TII	NPN	5								
801B	GE	NPN	17	30		250 μ A	20	1	50		100
903	TII	NPN	5				5	1	9	13	18
904	TII	NPN	5				5	1	18	24	38
904A	TII	NPN	5				5	1	18	40	
905	TII	NPN	5				5	1	40	50	
910	TII	NPN	5				5	1	75		330
941T1	TH	PNP	80				1	100		73†	
951	TII	NPN	5				10	5	9	16	
952	TII	NPN	5				10	5	9	16	
953	TII	NPN	5				10	5	9	16	
965T1	TH	PNP	80				5	1		110	
970	TII	NPN	53				35	100	3†		
987T1	TH CLE	PNP	80				1	100		36	
988T1	TH	PNP	80				1	100		54	
989T1	TH	PNP	13				5	1		24	
990T1	TH	PNP	80				5	1		36	
991T1	TH	PNP	80				5	1		54	
992T1	TH	PNP	80				5	1		75	
1350	CLE	PNP									
1859	WE	NPN									
2039-2	WE	PNP	13				10	10		50	
2058	WE	NPN									
2074	WE	PNP	55				6	1	14	22	60
2075	WE	PNP					1.5	50		20	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
			400		80.0W†		184T2C
			500		80.0W†		185T2A
			500		80.0W†		185T2B
			500		80.0W†		185T2C
5	1	12	500	50	150		200A
			6	100	150		201A
			6	100	150		201B
			6	100	150		201M
5	1	9	6	50	150		202A
							204A
2.5	0.5	25		50	100		300
2.5	0.5	22		50	100		301
2.5	0.5	20		50	100		302
			20		50		310
				250	150		320
			20	100	100		322T1
				100	100		326T1
				1.5A	12.0W†		355
			45	30	600		474
			20	10	80		501T1
			20	10	80		503T1
			20	10	80		504T1
			20	10	80		505T1
			20	10	80		508T1
			55	50	500		703B
				25	150		800
			30	20	250		801B
5	1	25		25	150		903
5	1	25		25	150		904
5	1	25		25	150		904A
5	1	25		25	150		905
				200	60		910
				60	750		941T1
				50	750		951
							952
				40	750		953
5	1	15		50	60		965T1
				140	8.7W†		970
5	1	15	18	200	60		987T1
			18	200	60		988T1
5	1	15	18	50	60		989T1
5	1	15	18	50	60		990T1
5	1	15	9	50	60		991T1
5	1	15		50	60		992T1
				25	150		1350
				100	50		1859
			30	40	225		2039-2
							2058
			60	5A	37.0W†		2074
							2075

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I'co			β				
		TYPE	No.	Vce	TYP μ A	MAX μ A	Vce	Ic mA	MIN	TYP	MAX
2081	WE	NPN					10	500	30†		
2082	WE	NPN					10	1A	25†	37†	
2097	WE	PNP						10	25†		75†
2141	WE	NPN					3	1		45	
3035	TH	NPN									
3604	LCT	NPN	5				4.5	1	9	13	
3607	LCT	NPN	5				4.5	1	19	32	
3609	LCT	NPN	5				4.5	1	19	32	
3907	RCA	PNP	13				0.2	24	24†	40†	
40022	RCA	PNP	16				2	1A	30†	50†	
40231	RCA	NPN	13				10	2	55	80	180
40232	RCA	NPN	13				10	2	90	175	300
40233	RCA	NPN	13				10	2	90	175	300
40234	RCA	NPN	13				10	2	35	80	470
40250	RCA	NPN	16				4	1.5A	25†		100†
40251	RCA	NPN	16				4	8A	15†		60†
40253	RCA	PNP	13				1	400	50†	75†	
40255	RCA	NPN	103	300		20 μ A	10	20	40†		160†
40256	RCA	NPN	103	200		50 μ A	10	20	40†		160†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			50	2A			2081
			60	10A			2082
			15	50	150		2097
				50	120		2141
							3035
4.5	1	20	40	5	50		3604
4.5	1	20	40	5	50		3607
4.5	1	20	40	5	50		3609
				200	150		3907
			32	5A	12.5W		40022
6	0.1	2.8	18	100	500		40231
6	0.1	2.8	18	100	500		40232
6	0.5	4	18	100	500		40233
6	0.1	2.8	18	100	500		40234
			40	4A	29.0W†		40250
			40	15A	117.0W†		40251
			25	500	125		40253
			350	1A	1.0W		40255
			250	1A	1.0W		40256

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
A1109	AM	NPN	17				5	1		70†	
A1170	AM	NPN	9				1	3 μ A	10†		
A1220	AMP	PNP	13				10	2		20†	
A1287	AM	NPN	17				10	150	25†		
A1288	AM	NPN	17				5	1	30†		500†
A1341	AM	NPN	17				1	50	50†		
A1858	WE	NPN					3	1		45	
AC105	TFN	PNP	1	6	300 μ A	1.3A	6	1		70	
AC106	TFN	PNP	1	6	300 μ A	1.3mA					
AC107	MULL VAL PHIL RO	PNP	1				5	0.3	40		250
AC108	SH	PNP	13				1	2	75	100	150
AC109	SH	PNP	13				1	2	50		100
AC110	SH	PNP	13				1	1	65		150
AC113	TEI	PNP	13				5	1	43	90	
AC114	TEI	PNP	13				1	125	44†	77†	
AC115	TEI	PNP	13				5	1	15		
AC116	TFN	PNP	17				6	4	55	85	140
AC117	TFN	PNP	149				1	300	40†	80†	
AC120	SH	PNP	13				5	20		50†	
AC121	SH	PNP	13	5		120	5	20		100	
AC122	TFN	PNP	17				6	2	40	100	300
AC122(G)	TFN	PNP	17				6	2	85		200
AC122(R)	TFN	PNP	17				6	2	40		95
AC122(V)	TFN	PNP	17				6	2	85		200
AC122(Y)	TFN	PNP	17				6	2	40		95
AC122/30(G)	TFN	PNP	17				6	2	40		200
AC122/30(R)	TFN	PNP	17				6	2	40		200
AC122/30(V)	TFN	PNP	17				6	2	40		200
AC122/30(Y)	TFN	PNP	17				6	2	40		200
AC123	TFN	PNP	17				6	4	55	85	140
AC124	TFN	PNP	149				1	300	40†	60†	
AC125	PHIL RAD	PNP	17				5	2	80	125	170
AC126	MULL PHIL	PNP	13				5	2	65†	140†	
AC127	AMP PHIL MULL	NPN	13				1	200	50†		
AC128	PHIL MULL	PNP	13					50	55†	90†	175†
AC129	TFN	PNP	104				2	250 μ A		40	
AC129(BK)	TFN	PNP	104				2	250 μ A	55		150
AC129(BL)	TFN	PNP	104				2	250 μ A	55		150
AC129(Y)	TFN	PNP	104				2	250 μ A	40		65
AC130	RAD	NPN	13								
AC131	TFN	PNP	17				1	50	50†	67†	
AC131/30	TFN	PNP	17				1	50	50†	67†	
AC132	PHIL MB	PNP	13					50		115	
AC134	ATES	PNP	13				6	1		35	
AC135	ATES	PNP	13				1	50		65	
AC136	ATES	PNP	13				1	50		75	
AC137	ATES	PNP	13				1	5		170	
AC138	ATES	PNP	13				6	5	25		
AC139	ATES	PNP	13				1	400	40†		180†
AC150	TFN	PNP	17				6	2	55	100	140

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
					200		A1109
			10		200		A1170
				15	90		A1220
					100		A1287
					100		A1288
					200		A1341
				100	50		A1858
			13	1A	400		AC105
			18	1A	400		AC106
4	0.3	3	15	5	83		AC107
0.5	0.2	18*	10	50	30		AC108
			20	50	30		AC109
			20	50	30		AC110
2	0.5	6	16	50	200		AC113
			16		110		AC114
2	0.5	6	16	50	200		AC115
			18	200	100		AC116
		5	18	1A	260		AC117
			20	300	600		AC120
				500	600		AC121
6	0.2	12	18	200	130		AC122
		5	18	100	90		AC122(G)
		5	18	100	90		AC122(R)
		5	18	100	90		AC122(V)
		5	18	100	90		AC122(Y)
		5	32	100	90		AC122/30(G)
		5	32	100	90		AC122/30(R)
		5	32	100	90		AC122/30(V)
		5	32	100	90		AC122/30(Y)
			32	200	100		AC123
			32	1A	260		AC124
5	0.5	4	32	100	550		AC125
5	0.5	4	32	100	500		AC126
5	0.5	4	15	200	280		AC127
			32	1A	550		AC128
2	250μA	8	6	10	12		AC129
2	25μA	8	6	10	12		AC129(BK)
2	25μA	8	6	10	12		AC129(BL)
2	250μA	8	6	10	12		AC129(Y)
			20	100	100		AC130
			18	1A	160		AC131
			32	1A	160		AC131/30
5	0.5	4	32	200	500		AC132
				35	150		AC134
			18	200	150		AC135
			25	200	150		AC136
			32	35	150		AC137
			20	50	100		AC138
			20	500	600		AC139
6	0.2	5	18	50	100		AC150

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
AC151	SH	PNP	13				1	2	30†		250†
AC152	SH	PNP	13				0.5	100	30†		150†
AC153	SH	PNP	13					50	45	90	
AC153K	SH	PNP	13					300	50†		250†
AC154	TEI	PNP	13				1	300	45†	80†	
AC155	TEI	PNP	13				5	1	28	43	70
AC156	TEI	PNP	13				5	1	55	85	120
AC157	TEI	NPN	13				1	125	52†	80†	195†
AC160A	TFN	PNP	17				4.5	0.3	35		120
AC160B	TFN	PNP	17				4.5	0.3	100		250
AC161	CSF	PNP	13				6	1		100	
AC162	SH	PNP	13				5	2	80		170
AC163	SH	PNP	13				5	2	130		300
AC164	MULL	PNP	13				0.5	0.2	40		160
AC165	TEI	PNP	41				5	1	43	90	
AC166	TEI	PNP	41				1	300	45†	80†	
AC167	TEI	PNP	41				1	300	45†	80†	200†
AC168	TEI	NPN	41				1	125	45†	80†	
AC169	TEI	PNP	41				1	1A	30†		100†
AC170	TFN	PNP	17				6	2	80	125	170
AC171	TFN	PNP	17				6	2	130	200	300
AC172	RAD PHIL	NPN	13				5	0.5	45		110
AC176	RAD	NPN	13					300		90†	
AC177	TEI	PNP	41				1	125	52†		250†
ACY16	TFN	PNP	149				2	10		80	
ACY17	MULL	PNP	13				1	300	50†		150†
ACY18	MULL	PNP	13				1	300	40†		120†
ACY19	MULL	PNP	13				1	300	80†		250†
ACY20	MULL	PNP	13				6	1		60	
ACY21	MULL	PNP	13				6	1		80	
ACY22	MULL	PNP	13				1.0	300	30†		300†
ACY23	SH	PNP	13	5	100 μ A		5	1	50	75	100
ACY24	TFN	PNP	149				1	150	25†	38†	
ACY27	STC	PNP	1				12	1	20		55
ACY28	STC	PNP	1				12	1	45		150
ACY29	STC	PNP	1				12	1	45		150
ACY30	STC	PNP	1				12	1	60		200
ACY31	STC	PNP	1				12	1	35		70
ACY32	SH	PNP	13				5	1	50		150
ACY33	SH	PNP	13					300	50†		250†
ACY34	STC	PNP	1				2	0.5	20		40
ACY35	STC	PNP	1				0.7	80	30†		90†
ACY36	STC	PNP	1				5.4	10	45†		125†
ACY38	TH	PNP	17				6	1		100	
ACY39	MULL	PNP	17								
ACY40	MULL	PNP	17								
ACY41	MULL	PNP	17								
ACZ10	TFN	PNP	1				1	30	60†		
AD103	SH	PNP	71				0.5	500	30†	75†	
AD104	SH	PNP	71				0.5	500	30†	75†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			24	50	75		AC151
			24	300	600		AC152
			30	3A	30.0W†		AC153
				1A	1.1W		AC153K
			16	500	200		AC154
			16	500	200		AC155
2	0.5	6	16	500	200		AC156
2	0.5	6	16	500	200		AC157
		3	10	10	30		AC160A
		3	10	10	30		AC160B
				100	150		AC161
5	0.5	4	24	200	900		AC162
5	0.5	4	24	200	900		AC163
2	0.5	9*	10	10	40		AC164
2	0.5	6	20	50	200		AC165
			20	500	200		AC166
			20	500			AC167
			20		200		AC168
			2	30			AC169
6	0.2	12	15	200	90		AC170
6	0.2	12	15	200	90		AC171
5	0.5	3		10	200		AC172
				1A	1.3W		AC176
			20	500			AC177
			30	1A	800		ACY16
2	0.5	3	32	1A	240		ACY17
2	0.5	3	30	1A	240		ACY18
2	0.5	3	30	1A	240		ACY19
2	0.5	3	20	1A	240		ACY20
2	0.5	3	20	1A	240		ACY21
2	0.5	3	15	1A	240		ACY22
			30	50	100		ACY23
			50	300	170		ACY24
					200		ACY27
					200		ACY28
					200		ACY29
					200		ACY30
					200		ACY31
			30	200	900		ACY32
				1A	1.1W		ACY33
					200		ACY34
					200		ACY35
					200		ACY36
				100	150		ACY38
2	0.5	3	40	500	200		ACY39
2	0.5	3	40	500	200		ACY40
6	0.5	3	18	500	200		ACY41
				300	400		ACZ10
			30	15A	15.0W†		AD103
			45	10A	15.0W†		AD104

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
AD105	SH	PNP	71				0.5	500	23†	40†	
AD130	SH	PNP	16				1	1A	20†	33†	100†
AD131	SH	PNP	16				1	1A	20†	33†	100†
AD132	SH	PNP	16				1	1A	20		100
AD133	SH	PNP	16					500	30†	75†	
AD136	SH	PNP	13					500		75†	
AD138	TFN	PNP	16				1.5	500	25†	40†	62.5†
AD138/50	TFN	PNP	16				1.5	500	25†	40†	62.5†
AD139	RAD PHIL	PNP	16					1A	30†		
AD140	MULL TEI	PNP	16				1.0	1A	30†		100†
AD142	ATES	PNP	16				2	500	50		200
AD143	ATES	PNP	16				2	500	50		200
AD148	SH	PNP	16				1	1A	30†		100†
AD149	SH PHIL MULL	PNP	16				1	1A	30†		100†
AD150	SH	PNP	16				1	1A	30†		100†
AD151	MB	PNP	16								
AD152	TFN	PNP	16				1	300	50†		150†
AD155	TFN	PNP	16				1	300	50†		150†
AD161	RAD	NPN	16					750	90†		
AD162	SH	PNP	16				1	500	50†		250†
AD163	SH	PNP	16				1	1A	12†		60†
ADY22	STC	PNP	16				5	10		150	
ADY23	STC	PNP	16				5	10		150	
ADY24	STC	PNP	16				5	10		150	
ADY25	STC	PNP	16				5	10	150		
ADY26	MULL PHIL	PNP	25								
ADY27	SH	PNP	16				1	1A	30†		100†
ADY28	TH	PNP	16				2	2A		50†	
ADZ11	RAD RO MULL PHIL	PNP	25				2	1A	40†	70†	120†
ADZ12	MULL RAD RO PHIL	PNP	25				2	1A	40†	70†	120†
AF101	TFN	PNP	1	6	40 μ A	260 μ A	6	500 μ A	50		
AF102	VAL RO MULL PHIL	PNP	3				12	1	20		
AF105	TFN	PNP	1				6	500 μ A	45	60	
AF105A	TFN	PNP	1				6	500 μ A	50		
AF106	SH TFN	PNP	9				12	1	12		65
AF107	SH	PNP	13				10	10		60	
AF108	SH	PNP	13				10	10		60	
AF109	SH	PNP	9				10	2	20	100	
AF111	INT BC	PNP	4								
AF112	INT BC	PNP	4								
AF113	INT BC	PNP	4								
AF114	VAL RO MULL PHIL SH	PNP	3				6	1		150	
AF115	VAL RO MULL PHIL SH	PNP	3				6	1		150	
AF116	VAL RO MULL PHIL SH	PNP	3				6	1		150	
AF117	MULL VAL PHIL SH	PNP	3				6	1	40	150	
AF118	RO MULL PHIL	PNP	3				2	10	35†	180†	
AF121	PHIL VAL	PNP	98				10	3	30†		
AF124	MULL PHIL SH	PNP	98				6	1	40	140	
AF125	MULL PHIL SH	PNP	98				6	1	40	140	
AF126	MULL PHIL SH	PNP	98				6	1	40	140	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			60	8A	15.0W†		AD105
			45	3A	30.0W†		AD130
			60	3A	30.0W†		AD131
			32	15A	30.0W†		AD132
			22	10A	9.0W†		AD133
			22	10A	9.0W†		AD136
			30	15A	30.0W†		AD138
			50	15A	30.0W†		AD138/50
			32	1A	11.0W†		AD139
			32	3A	35.0W†		AD140
			50	10A	30.0W†		AD142
			30	10A	30.0W†		AD143
			32	2A	11.0W†		AD148
			50	3.5A	22.5W†		AD149
			30	3.5A	27.5W†		AD150
			50	3.5A	25.0W†		AD151
			30	2A	6.0W†		AD152
			16	2A	6.0W†		AD155
				2A	6.0W†		AD161
			20	2A	6.5W†		AD162
			80	3A	30.0W†		AD163
			15	10A	20.0W†		ADY22
			40	10A	20.0W†		ADY23
			40	10A	20.0W†		ADY24
			60	7.5A	20.0W†		ADY25
			60	25A	100.0W†		ADY26
			30	3.5A	27.5W†		ADY27
				6A	45.0W†		ADY28
			40	20A	25.0W†		ADZ11
			60	20A	25.0W†		ADZ12
			12		30		AF101
			25	10	50		AF102
			12		30		AF105
			12		30		AF105A
			18	10	60		AF106
				70	500		AF107
				70	500		AF108
			18	12	60		AF109
			15	10	65		AF111
			15	10	65		AF112
			15	10	65		AF113
			32	10	75		AF114
			20	10	75		AF115
			20	10	75		AF116
			20	10	75		AF117
			50	30	250		AF118
			25	10	135		AF121
			32	10	60		AF124
			20	10	60		AF125
			20	10	60		AF126

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
AF127	MULL PHIL SH	PNP	98	2	15 μ A		6	1		150	70
AF128	TFN	PNP	1				2	250 μ A	25	50	
AF129	BC	PNP	9				6	1		50	
AF130	BC	PNP	9				6	1		60	
AF131	BC	PNP	9				6	1		75	
AF132	BC	PNP	9				6	1		75	
AF133	BC	PNP	9				6	1		35	
AF134	TFN	PNP	9				6	1		110	
AF135	TFN	PNP	9				6	1		100	
AF136	TFN	PNP	9				6	1		80	
AF137	TFN	PNP	9				6	1		60	
AF138	TFN	PNP	9				6	1	60	100	
AF139	SH TFN	PNP	9	15	50 μ A		12	1.5	10†	50†	
AF142	ATES	PNP	3				6	1.5		100	
AF143	ATES	PNP	3				6	1.5		85	
AF144	ATES	PNP	3				6	1.5		65	
AF146	ATES	PNP	3				6	1		100	
AF147	ATES	PNP	3				6	1		80	
AF148	ATES	PNP	3				6	1		100	
AF149	ATES	PNP	3				6	1		225	
AF150	ATES	PNP	3				6	1		70	
AF164	ATES	PNP	131				6	1.5		100	
AF165	ATES	PNP	131				6	1.5		85	
AF166	ATES	PNP	131				6	1.5		65	
AF168	ATES	PNP	131				6	1		100	
AF169	ATES	PNP	131				6	1		80	
AF170	ATES	PNP	131				6	1		100	
AF171	ATES	PNP	131				6	1		225	
AF172	ATES	PNP	131				6	1		70	
AF178	TFN MULL PHIL	PNP	9				12	1	20		
AF179	MULL RAD	PNP	9								
AF180	RAD MULL	PNP	9								
AF181	MB MULL	PNP	9								
AF185	MB PHIL RAD	PNP	9/17								
AF186	RAD	PNP	17								
AF186(B)	PHIL	PNP	9								
AF186(G)	MULL	PNP	9								
AF186(R)	PHIL	PNP	9								
AF186(W)	MULL	PNP	9								
AF200	SH	PNP	9				10	3	30	85	
AF201	SH	PNP	9				10	3	20	85	
AF202	SH	PNP	9				10	3	20	85	
AF202S	SH	PNP	9				10	3	20	85	
AFY10	SH	PNP	13				6	2	10	20	
AFY11	SH	PNP	13				6	1	10	20	
AFY12	SH TFN	PNP	9				12	1	30	65	
AFY14	TFN	PNP	149				6	10		120	
AFY15	TFN	PNP	17				6	500 μ A	30	80	200
AFY16	SH TFN	PNP	9				12	1.5	10†	60†	
AFY18	SH	PNP	13				10	10	40		160

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
12	1	7.5	20	10	60		AF127
			6	10	12		AF128
			20	10	60		AF129
			20	10	50		AF130
			20	10	50		AF131
			20	10	50		AF132
			20	10	50		AF133
			25		60		AF134
			25		60		AF135
			25		60		AF136
			25		60		AF137
			25		60		AF138
			15	8	60		AF139
				10	80		AF142
				10	80		AF143
				10	80		AF144
				10	80		AF146
				10	80		AF147
			24	10	80		AF148
			24	10	80		AF149
				10	80		AF150
				10	80		AF164
				10	80		AF165
				10	80		AF166
				10	80		AF168
				10	80		AF169
				10	80		AF170
			24	10	80		AF171
				10	80		AF172
			25	10	75		AF178
			25	15	140		AF179
			25	25	156		AF180
			30	20	156		AF181
				30	120		AF185
				15	100		AF186
				15	70		AF186(B)
			25	15	90		AF186(G)
				15	70		AF186(R)
			25	15	90		AF186(W)
				10	100		AF200
				10	100		AF201
				30	100		AF202
				30	100		AF202S
			15	70	180		AFY10
			15	70	180		AFY11
			18	10	60		AFY12
			10	250	120		AFY14
			12	50	100		AFY15
			20	8	60		AFY16
			15	100	560		AFY18

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I'_{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
AFY19	MULL PHIL	PNP	17								
AFY34	SH	PNP	13				12	2	10†		
AFY37	SH	PNP	9				12	2	10†	40†	
AFY39	SH	PNP	9				10	3	20†	85†	
AFZ10	TFN	PNP	1								
AFZ11	MULL RO	PNP	3				6	1		70	
AFZ12	RAD PHIL	PNP	98				6	1	20	70	
AGC1	SGS	NPN	17				10	4	15†	60†	
AL100	ATES	PNP	16				2	5A	75†	125†	200†
AL101	ATES	PNP	16				2	1A	50†	90†	150†
AL102	ATES	PNP	16				2	1A	100†	150†	
AL103	ATES	PNP	16				2	1A	40†	80†	
ALZ10	TFN	PNP	146				6	4	30	90	
AMF101	AMF	NPN	75								
AMF102	AMF	NPN	75								
AMF103	AMF	NPN	75								
AMF104	AMF	NPN	16								
AMF105	AMF	NPN	16								
AMF106	AMF	NPN	16								
AMF107	AMF	NPN	35								
AMF108	AMF	NPN	35								
AMF109	AMF	NPN	35								
AMF110	AMF	NPN	35								
AMF111	AMF	NPN	35								
AMF112	AMF	NPN	75								
AMF113	AMF	NPN	75								
AMF114	AMF	NPN	35								
AMF115	AMF	NPN	16								
AMF116	AMF	NPN	16								
AMF117	AMF	NPN	16								
AMF117A	AMF	NPN	16								
AMF118	AMF	NPN	16								
AMF118A	AMF	NPN	16								
AMF119	AMF	NPN	16								
AMF119A	AMF	NPN	16								
AMF120	AMF	NPN	16								
AMF120A	AMF	NPN	16								
AMF121	AMF	NPN	75								
AMF121A	AMF	NPN	75								
AMF122	AMF	NPN	75								
AMF122A	AMF	NPN	75								
AMF123	AMF	NPN	75								
AMF123A	AMF	NPN	75								
AMF124	AMF	NPN	75								
AMF124A	AMF	NPN	75								
AP1357	TEN		13				6	1		60	
ASA2	AM	NPN	102				10	1	30†		
ASY12	BC	PNP	13				0.6	600	20†		
ASY12/1	BC	PNP	28				0.5	250	30†		
ASY12/2	BC	PNP	28				0.5	250	40†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			32	150	800		AFY19
				20	35		AFY34
				20	112		AFY37
				30	100		AFY39
				100	150		APZ10
			10	10	50		APZ11
		6*	25	10	50		APZ12
			15		360		AGC1
			40	10A	50.0W†		AL100
			40	10A	50.0W†		AL101
			50	5A	12.5W†		AL102
			40	5A	12.5W†		AL103
			30	250	250		ALZ10
				4A	85.0W†		AMF101
				4A	85.0W†		AMF102
				4A	85.0W†		AMF103
				4A	75.0W†		AMF104
				4A	75.0W†		AMF105
				4A	75.0W†		AMF106
				4A	85.0W†		AMF107
				4A	85.0W†		AMF108
				4A	85.0W†		AMF109
				4A	85.0W†		AMF110
				7.5A	85.0W†		AMF111
				7.5A	85.0W†		AMF112
				7.5A	85.0W†		AMF113
				7.5A	85.0W†		AMF114
				7.5A	75.0W†		AMF115
				7.5A	75.0W†		AMF116
				4A	85.0W†		AMF117
				4A	85.0W†		AMF117A
				4A	85.0W†		AMF118
				4A	85.0W†		AMF118A
				4A	85.0W†		AMF119
				4A	85.0W†		AMF119A
				4A	85.0W†		AMF120
				4A	85.0W†		AMF120A
				4A	85.0W†		AMF121
				4A	85.0W†		AMF121A
				4A	85.0W†		AMF122
				4A	85.0W†		AMF122A
				4A	85.0W†		AMF123
				4A	85.0W†		AMF123A
				4A	85.0W†		AMF124
				4A	85.0W†		AMF124A
							AP1357
10	0.3	8*	28		300		ASA2
			32	600	330†		ASY12
			32	600	330†		ASY12/1
			32	600	330†		ASY12/2

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
ASY13	BC	PNP	13				0.6	600	20†		
ASY13/1	BC	PNP	28				0.5	250	30†		
ASY13/2	BC	PNP	28				0.5	250	40†		
ASY14	BC	PNP	13				0.6	600	24†		
ASY14/1	BC INT	PNP	28				0.5	250	20†		40†
ASY14/2	BC INT	PNP	28				0.5	250	30†		60†
ASY14/3	BC INT	PNP	28				0.5	250	50†		100†
ASY24	TFN	PNP	17				0.5	4	40†	90†	
ASY24B	TFN	PNP	17				0.5	4	40†	90†	
ASY26	MULL RAD PHIL TFN	PNP	17					20	30†		80†
ASY27	MULL TFN	PNP	17					20	50†		150†
ASY28	TFN MULL PHIL	NPN	17				0.1	20	30†		80†
ASY29	TFN MULL PHIL	NPN	17				0.1	20	50†		150†
ASY30	TFN	PNP	149				0.5	200	20†	65†	
ASY31	PHIL	PNP	1								
ASY32	PHIL	PNP	1								
ASY48	SH	PNP	13	5		100 μ A	5	5		60	
ASY49	STC	PNP	13	20		1mA	12	1		75	
ASY50	STC	PNP	47					5	15		
ASY51	STC	PNP	1					10	30		125
ASY52	STC	PNP	13	20		1mA	12	1		75†	
ASY53	STC	NPN	13				4.5	1	20	30	100
ASY54	STC	PNP	1				0.2	100	15		95
ASY55	STC	PNP	1				0.2	100	25		125
ASY56	STC	PNP	1					10	25		60
ASY57	STC	PNP	1					10	30		80
ASY58	STC	PNP	1					10	40		100
ASY59	STC	PNP	1					10	60		150
ASY60	STC	PNP	1				0.1	100	25		125
ASY61	STC	NPN	13				4.5	1	20	30	100
ASY62	STC	NPN	13				4.5	1	25	60	200
ASY63	STC	PNP	1				0.1	3	25		100
ASY64	STC	PNP	1				0.2	40	20		
ASY66	STC	PNP	1				0.1	100	15		95
ASY67	MULL	PNP	9				6	10	50		
ASY70	SH	PNP	13				0.5	100	30†		150†
ASY71	STC	PNP	13	35		1mA	12	1		75†	
ASY73	RAD PHIL	NPN	17					200	20†		
ASY74	RAD PHIL	NPN	17					200	35†		
ASY75	RAD PHIL	NPN	17					200	50†		
ASY76	MB RAD PHIL	PNP	17				1	600	20†		
ASY77	MB RAD PHIL	PNP	17				1	600	20†		
ASY80	MB RAD PHIL	PNP	17				1	600	40†		
ASY81	TH	PNP	17				1	100		60†	
ASY82	TEI	PNP	14				1	125	40†		120†
ASY83	TEI	PNP	41				1	125	100†		350†
ASY84	TEI	PNP	41				1	125	40†		120†
ASY85	TEI	PNP	41				1	125	100†		350†
ASY86	TEI	NPN	41				1	125	40†		120†
ASY87	TEI	NPN	41				1	125	100†		350†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			30	600	330		ASY13
			30	600	330		ASY13/1
			33	600	330		ASY13/2
			40	250	100		ASY14
			40	250	100		ASY14/1
			40	250	100		ASY14/2
			40	250	100		ASY14/3
			12	250	100		ASY24
			10	250	100		ASY24B
			25	200	150		ASY26
			20	200	150		ASY27
			25	100	125		ASY28
			20	100	125		ASY29
			12	250	120		ASY30
			20	100	125		ASY31
			20	100	125		ASY32
4.5	0.5	6	40	300	600		ASY48
			20		150		ASY49
			10	12	200		ASY50
			20		150		ASY51
4.5	0.5	6	20		150		ASY52
			10	250	100		ASY53
			15		200		ASY54
			15		200		ASY55
			10		200		ASY56
			10		200		ASY57
			10		200		ASY58
			10		200		ASY59
4.5	0.5	5	8		200		ASY60
			12	250	100		ASY61
4.5	0.5	5	15	250	100		ASY62
			8		200		ASY63
			20		200		ASY64
			16		200		ASY66
			50	50	100		ASY67
			20	300	900		ASY70
4.5	0.5	6	35		150		ASY71
			15	400	140		ASY73
			15	400	140		ASY74
			15	400	140		ASY75
2	0.5	15*	32	300	500		ASY76
2	0.5	15*	60	300	500		ASY77
2	0.5	15*	40	300	500		ASY80
				200	225		ASY81
			16	500	200		ASY82
			16	500	200		ASY83
			20	500	200		ASY84
			20	500	200		ASY85
			12	500	200		ASY86
			12	500	200		ASY87

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
ASY88	TEI	NPN	41				1	125	40†		120†
ASY89	TEI	NPN	41				1	125	100†		350†
ASZ10	TFN	PNP	1				0.5	4	35†	65†	
ASZ11	VAL PHIL MUL RO	PNP	1					15		80	
ASZ12	RO VAL	PNP	1								
ASZ15	PHIL	PNP	16				1	1A	20†		55†
ASZ16	PHIL VAL	PNP	16				1	1A	45†		130†
ASZ17	PHIL VAL	PNP	16				1	1A	25†		75†
ASZ18	PHIL VAL	PNP	16				1	1A	30†		110†
ASZ20	MULL RO PHIL	PNP	3				6	1	45		
ASZ21	MULL RAD PHIL	PNP	3				6	1	11†	30†	
ASZ23	MULL RAD PHIL	PNP	3								
ASZ30	TFN	PNP	1				0.5	4	35†	65†	
AT/AF1	AT	PNP	14				6	1	20	60	200
AT/AF2	AT	PNP	14				6	1	45	70	125
AT/IF1	AT	PNP	14				6	1	20		200
AT/RF1	AT	PNP	14				6	1	25		200
AT/RF2	AT	PNP	14				6	1	40		200
AT/S11	AT	PNP	13					12	30		
AT/S12	AT	PNP	13					12	30		
AT/S13	AT	PNP	13					15		100†	
ATZ10	MULL	PNP	1				1	1	2.1		
AU101	PHIL MULL	PNP	16								
AU102	PHIL	PNP	16								
AU103	RAD MULL PHIL	PNP	16				1	10A	16†		
AU104	PHIL	PNP	16				1	10A	15†		
AUY10	MULL PHIL	PNP	16								
AUY18	SH	PNP	13				0.5	5A	20†		60†
AUY19	SH	PNP	16				1	1A	20†		100†
AUY20	SH	PNP	16				1	1A	20†		100†
AUY21	SH	PNP	42				0.5	500	28†	70†	
AUY22	SH	PNP	42				0.5	500	23†	40†	
AUY28	TFN	PNP	16				1.5	5A	20†	33†	
AUY29	SH	PNP	42				0.5	5A	20†		60†
AUY30	TH	PNP	16				2	5A		35†	
AUY31	TH	PNP	16				2	5A		25†	
AUY32	TH	PNP	16				2	2A		50†	
AUY33	TH	PNP	16				2	2A		50†	
AUY34	SH	PNP	16				1	1A	12†		60†
AUZ11	TFN	PNP	146				1	500	30†	60†	
AUZ11D	TFN	PNP	146				1	500	30†	60†	
B111	BEN	PNP	16				5	250		40	
B112	BEN	PNP	16								
B134	BEN	PNP	16				3	10A		15†	
B134A	BEN	PNP	16				3	10A		15†	
B134B	BEN	PNP	16				3	10A		15†	
B177	BEN	PNP						500		150†	
B178	BEN	PNP						500		40†	
B179	BEN	PNP						500		25†	
B1013	BEN	PNP	57				1	500	30†		75†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	1	25* 25*	16	500	200		ASY88
			16	500	200		ASY89
				250	150		ASZ10
			20	200	125		ASZ11
			20	200	125		ASZ12
6	1	15	60	6A	30.0W†		ASZ15
			32	6A	30.0W†		ASZ16
			32	6A	30.0W†		ASZ17
			32	6A	30.0W†		ASZ18
			40	15	100		ASZ20
			15	30	120		ASZ21
				100	160		ASZ23
				250	30		ASZ30
			18	100	120		AT/AF1
			18	100	120		AT/AF2
			16	100	120		AT/IF1
			16	100	120		AT/RF1
			16	100	120		AT/RF2
			24	100	120		AT/S11
			18	100	120		AT/S12
				100	120		AT/S13
			35	25	15		ATZ10
			120	10A	10.0W†		AU101
			40	10A	10.0W†		AU102
			155	10A	10.0W†		AU103
				12A	15.0W†		AU104
			60	700	4.5W†		AUY10
			45	8A	9.0W†		AUY18
			45	3A	30.0W†		AUY19
			60	3A	30.0W†		AUY20
			45	10A	36.0W†		AUY21
			60	8A	36.0W†		AUY22
			45	10A	30.0W†		AUY28
			32	15A	36.0W†		AUY29
				6A	45.0W†		AUY30
				6A	45.0W†		AUY31
				3A	45.0W†		AUY32
				3A	45.0W†		AUY33
			80	3A	30.0W†		AUY34
			20	1A	6.0W†		AUZ11
			20	1A	6.0W†		AUZ11D
			40	3A	25.0W†		B111
			40	2A	5.0W†		B112
			40	15A	50.0W†		B134
			70	15A	50.0W†		B134A
			80	15A	50.0W†		B134B
			30	3A	25.0W†		B177
			30	3A	25.0W†		B178
			40	3A	25.0W†		B179
							B1013

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
B1013A	BEN	PNP	57				1	500	30†		75†
B1017	BEN	PNP	16					500		25†	
B1022	BEN	PNP	13				4.5	10	20		
B1085	BEN	PNP	16				2	5A	40†		
B1151	BEN	PNP	16				2	4A	20†		
B1151A	BEN	PNP	16				2	4A	20†		
B1151B	BEN	PNP	16				2	4A	20†		
B1152	BEN	PNP	16				2	8A	20†		
B1152A	BEN	PNP	16				2	8A	20†		
B1152B	BEN	PNP	16				2	8A	20†		
B1154	BEN	PNP	17				0.5	10	40	80†	120†
B1154A	BEN	PNP	17				0.5	10	40†	80†	120†
B1154B	BEN	PNP	17				0.5	10	40†	80†	120†
B1178	BEN	PNP	16				2	5A	40†		
B1181	BEN	PNP	16								
B1274	BEN	PNP	16				2	1A		105	
B1274A	BEN	PNP	16				2	1A		105	
B1274B	BEN	PNP	16				2	1A		105	
B3045	BEN	PNP	16				0.55	500	20†		
B3046	BEN	PNP	16				0.55	500	20†		
B10060	BEN	PNP	16				2	12A	25†		
B10061	BEN	PNP	16				2	12A	15†		
B10062	BEN	PNP	16				2	12A	25†		
B10063	BEN	PNP	16				2	12A	15†		
B10064	BEN	PNP	16				2	1A	15†		
B10065	BEN	PNP	16				2	12A	25†		
B10066	BEN	PNP	16				2	12A	15†		
B10067	BEN	PNP	16				2	12A	25†		
B10068	BEN	PNP	16				2	12A	15†		
B10069	BEN	PNP	16				2	1A	15†		
BC107	RAD SH MULL TFN	NPN	17				5	2	100		600
BC108	SH MULL	NPN	17				5	2	125†		500†
BC109	MULL	NPN	17				5	2	240†		900†
BC111	RAD	NPN	13					10	80†		
BC112	RAD	NPN	17						0.2	60†	
BC121	SH	NPN	147				0.5	250 μ A	50		400
BC122	SH	NPN	147				0.5	250 μ A	50		400
BC123	SH	NPN	147				0.5	250 μ A	50		250
BC1073	BEN	PNP	16				2	5A	20†		60†
BC1073A	BEN	PNP	16				2	5A	20†		60†
BC1073B	BEN	PNP	16				2	5A	20†		60†
BC1274A	BEN	PNP	16				2	1A		105	
BC1274B	BEN	PNP	16				2	1A		105	
BCY10	RO PHIL RAD	PNP	1				6	10		40	
BCY11	RO PHIL RAD	PNP	1				6	10		40	
BCY12	RO PHIL RAD	PNP	1				6	10		40	
BCY13	SH	NPN	13					10	10†		
BCY14	SH	NPN	13					10	10†		
BCY15	SH	NPN	13					10	10†		
BCY16	SH	NPN	13					10	10†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			100	3A	5.0W†		B1013A
			20	3A	25.0W†		B1017
			15	300	300		B1022
			120	10A	35.0W†		B1085
			25	15A	50.0W†		B1151
			40	15A	50.0W†		B1151A
			70	15A	50.0W†		B1151B
			25	15A	50.0W†		B1152
			40	15A	50.0W†		B1152A
			70	15A	50.0W†		B1152B
			20	300	400		B1154
			40	300	400		B1154A
			60	300	400		B1154B
			160	10A	35.0W†		B1178
			160	25A	90.0W†		B1181
			40	10A	60.0W†		B1274
			80	10A	60.0W†		B1274A
			120	10A	60.0W†		B1274B
			20	2A	20.0W†		B3045
			20	2A	20.0W†		B3046
			80	14A	60.0W†		B10060
			80	14A	60.0W†		B10061
			80	14A	60.0W†		B10062
			80	14A	60.0W†		B10063
			3	4A	10.0W†		B10064
			80	14A	60.0W†		B10065
			80	14A	60.0W†		B10066
			80	14A	60.0W†		B10067
			80	14A	60.0W†		B10068
			3	4A	10.0W†		B10069
5	10μA	4	32	30	300		BC107
			20	100	260		BC108
5	0.2	2	20	100	300		BC109
				50	100		BC111
				50	30		BC112
			5	50	90		BC121
			20	50	90		BC122
			30	50	90		BC123
			40	10A	60.0W†		BC1073
			80	10A	60.0W†		BC1073A
			120	10A	60.0W†		BC1073B
			80	10A	60.0W†		BC1274A
			120	10A	60.0W†		BC1274B
			32	250	300		BCY10
2	0.1	6	20	500	3.0W†		BCY11
			32	500	300		BCY12
			60	200	450		BCY13
			100	200	450		BCY14
			60	300	450		BCY15
			100	300	450		BCY16

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
BCY17	TAG	PNP	17				6	1	20	35	50
BCY18	SH TAG	PNP	17	30			5 μ A	6	1	40	100
BCY19	SH TAG	PNP	17	50			5 μ A	6	1	20	35
BCY20	SH TAG	PNP	17	100			5 μ A	6	1	10	15
BCY21	TAG	PNP	17				6	1	10	17	25
BCY22	TAG	PNP	17				6	1	10	17	25
BCY23	TAG	PNP	17				6	1	20	35	50
BCY24	TAG	PNP	17				6	1	10	17	25
BCY25	TAG	PNP	17				6	1	40	60	100
BCY26	TAG	PNP	17				6	1	10	17	25
BCY27	TAG SH	PNP	17				6	1	15	20	60
BCY28	TAG SH	PNP	17				6	1	25	35	80
BCY29	MULL TAG	PNP	17				6	1	10	15	40
BCY30	MULL PHIL	PNP	17				6	1	15	25	35
BCY31	MULL PHIL	PNP	17				6	1	25	35	60
BCY32	MD RAD MULL	PNP	17				6	1	35	55	80
BCY33	MULL PHIL	PNP	17				6	1	15	25	35
BCY34	MULL PHIL	PNP	17				6	1	25	35	60
BCY38	MULL PHIL	PNP	17				6	10	15	27	100
BCY39	MULL PHIL	PNP	17				6	10	15	35	100
BCY40	MULL PHIL	PNP	17				6	10	30	45	160
BCY42	STC	NPN	17	16			150nA	5	1	45†	90†
BCY43	STC	NPN	17	16			150nA	5	1	75†	150†
BCY49	MULL	PNP	17				6	1	25		
BCY50	SEL	NPN	17				1.5	0.1	60†		
BCY54	MULL PHIL	PNP	17				6	10	20	50	120
BCY55	RAD MULL	NPN	17	5			2nA	5	1	150	600
BCY58	SH	NPN	17				500mV	10 μ A		100†	
BCY59	SH	NPN	17				500mV	10 μ A		100†	
BCZ10	PHIL VAL RO	PNP	1				6	1	15	20	60
BCZ11	RO MULL PHIL VAL	PNP	1				6	1	25	35	60
BCZ12	PHIL VAL RO	PNP	1				6	1	10	15	
BCZ13	RO PHIL	PNP	29				2	1	15	25	40
BCZ14	MB RAD PHIL	PNP	29				2	1	30	55	90
BDY10	MB RAD MULL	NPN	16					200	12†		
BDY11	MULL	NPN	16					200	12†		
BF108	TH	NPN					10	30	15†	50†	
BF109	MB	NPN	17					80	20		
BF110	SH	NPN	17				10	10	30†		
BF114	TFN	NPN	17				10	10	20†		
BF115	RAD MULL SH PHIL	NPN	9				10	1	46†		165†
BF140	TH	NPN	17				10	10	15†	50†	
BF167	RAD	NPN	17								
BF168	RAD	NPN	17								
BFY10	MULL PHIL	NPN	17				5	5	20		
BFY11	MULL PHIL	NPN	17				5	5	35		
BFY12	SH	NPN	13				10	10		45	
BFY13	SH	NPN	13				12	10	20†		
BFY14	SA	NPN	13				12	10	12†		
BFY15	STC	NPN	17				1.6	100	8†	22†	40†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
4	0.3	4	30	50	350		BCY17
4	0.3	3.5	30	50	350		BCY18
4	0.3	4	50	50	350		BCY19
4	0.3	5	100	50	350		BCY20
4	0.3	5	50	50	350		BCY21
4	0.3	5	75	50	350		BCY22
4	0.3	4	10	50	350		BCY23
4	0.3	5	10	50	350		BCY24
4	0.3	3.5	10	50	350		BCY25
4	0.3	5	30	50	350		BCY26
4	0.3	8	25	50	275		BCY27
4	0.3	6	25	50	275		BCY28
4	0.3	8	60	50	275		BCY29
			64	50	250		BCY30
			64	50	250		BCY31
			64	100	250		BCY32
			32	50	250		BCY33
			32	50	250		BCY34
2	0.5	8	32	250	410		BCY38
2	0.5	8	64	250	410		BCY39
2	0.5	8	32	250	410		BCY40
2	0.1	10*	25	100	300		BCY42
2	0.1	10*	20	100	300		BCY43
			15	20	250		BCY49
			5	200	200		BCY50
2	0.5	8	50	250	410		BCY54
5	10μA	3*	45	30	300		BCY55
			32	100	260		BCY58
			45	100	260		BCY59
2	0.5	8	25	50	250		BCZ10
2	0.5	6	25	50	250		BCZ11
2	0.5	8	60	50	250		BCZ12
2	0.5	5	7	10	85		BCZ13
2	0.5	5	20	10	85		BCZ14
			50	2A	130.0W†		BDY10
			100	2A	130.0W†		BDY11
			135		800		BF108
				40	1.2W		BF109
				40	600		BF110
			135	40	565		BF114
10	1	1.2	50	30	145		BF115
			135		800		BF140
				25	145		BF167
10	5	40*	45	25	200		BF168
				50	300		BFF10
10	5	40*	45	50	300		BFY11
			40	100	550		BFY12
			80	30	550		BFY13
			110	30	550		BFY14
2	0.2	8	20	500	600		BFY15

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
BFY16	STC	NPN	17	20	0.2	3	2.5	20	21	37	60
BFY17	STC	NPN	13	9	0.4nA	3nA	9	10	35	40	110
BFY18	STC	NPN	13	9	0.4nA	3nA	9	10	35	40	110
BFY19	STC	NPN	13	9	0.4nA	50nA	9	10	35	110	200
BFY22(Y)	BC	NPN	112	2		20nA	0.5	0.2	30	60	90
BFY23(R)	BC	NPN	112	2		20nA	0.5	0.2	70	110	220
BFY24(BL)	BC	NPN	112	2		20nA	0.5	0.2	45	100	130
BFY25	STC	NPN	17				9	10	35		
BFY26	STC	NPN	17				9	10	35		
BFY27	TFN	NPN	17				5	10	40†		160†
BFY29(0)	BC	NPN	112	25		20nA	0.5	0.2	30	60	90
BFY30(W)	BC	NPN	112	25		20nA	0.5	0.2	70	110	220
BFY33	SH	NPN	17				10	150	40†		
BFY34	SH	NPN	17				10	150	40†		120†
BFY44	RAD MULL PHIL	NPN	17				10	150		20†	
BFY45	SH	NPN	17				10	10	30†		
BFY46	SH	NPN	17				10	150	70†	100†	
BFY50	RAD MULL PHIL	NPN	17				6	1	10	30	
BFY51	RAD MULL PHIL	NPN	17				6	1	30	45	
BFY52	RAD MULL PHIL	NPN	17				6	1	30	90	
BFY55	RAD PHIL	NPN	17								
BFY56	SGS	NPN	17				5	1		60	
BFY57	SGS	NPN	17				5	1		50	
BFY63	SGS	NPN									
BFY64	SGS	PNP	17				10	10		200	
BFY67	RAD PHIL	NPN	17				5	1	30		100
BFY70	RAD PHIL	NPN	17				10	150		20†	
BFY72	SGS	NPN	17				10	1		72	
BFY74	SGS	NPN									
BFY75	SGS	NPN									
BFY76	SGS	NPN	17	5		0.1nA	5	1	80	300	550
BFY77	SGS	NPN	17	5		0.1nA	5	1	150	450	1000
BFY78	SGS	NPN	17				1	3	20†	50†	
BFY79	SGS	NPN	9				10	4	30†		
BFY81	SGS	NPN	102	5		10nA	5	1	150†		
BFY82	SGS	NPN	102								
BFY83	SGS										
BFY84	SGS	NPN	102				1	3	20†		
BFZ10	MULL RO	PNP	1				6	10		30†	
BLY10	STC	NPN	16	20	0.2	3	9	20	8	30	50
BLY11	STC	NPN	16	20		0.2μA	20	9	20	42	68
BLY12	STC	NPN	16				2	2A	30†		
BLY14	RAD MULL	NPN	73				10	500		5†	
BLY17	RAD	NPN	25					10A	5†		
BSX12	SGS	NPN	17								
BSX21	RAD MULL PHIL	NPN	17				3	4	20†	40†	
BSX26	SGS	NPN	17								
BSX27	SGS	NPN	17				0.4	1	15†		
BSX28	SGS	NPN	17								
BSX29	SGS	PNP	17								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
2	0.1	6	20	500	600		BFY16
			18	50	300		BFY17
			40	100	300		BFY18
			30	100	300		BFY19
0.5	0.2	7	5	50	50		BFY22(Y)
0.5	0.2	7	5	50	50		BFY23(R)
0.5	0.2	5*	5	50	50		BFY24(BL)
					600		BFY25
					360		BFY26
			50		320		BFY27
0.5	0.2	7	30	50	50		BFY29(O)
0.5	0.2	7	30	50	50		BFY30(W)
			30	500	2.6W		BFY33
			50	500	2.6W		BFY34
			60	1A	800		BFY44
				30	2.1W		BFY45
			50	500	2.6W		BFY46
			35	1A	800		BFY50
			30	1A	800		BFY51
			20	1A	800		BFY52
			35	1A	800		BFY55
			45		800		BFY56
			125		800		BFY57
			15		600		BFY63
5	30μA	1	40		700		BFY64
				1A	800		BFY67
			40	1A	800		BFY70
			28		800		BFY72
			45		360		BFY74
					360		BFY75
5	10μA	1.9	45	50	360		BFY76
5	10μA	1.8	45	50	360		BFY77
			12	50	300		BFY78
			30		300		BFY79
			45				BFY81
			45		300		BFY82
			80				BFY83
			12		300		BFY84
6	1	7	15	10	50		BFZ10
9	0.2	8	20	500	2.50W		BLY10
2	0.1	6	20	500	3.0W		BLY11
					25.0W†		BLY12
			80	1A	7.0W		BLY14
				10A	100.0W†		BLY17
			12	1A	600		BSX12
			80	50	250		BSX21
			15		360		BSX26
			6		300		BSX27
			12		360		BSX28
			12		360		BSX29

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
BSX30	SGS	NPN	17								
BSX35	SGS	PNP	17								
BSY10	MULL PHIL	NPN	17				5	5	40		
BSY11	MULL PHIL	NPN	17				5	5	55		
BSY17	SH	NPN	17				0.35	10	20†		60†
BSY18	SH	NPN	13	15		10mA	1	150	8†	40	
BSY19	INT TFN	NPN	17				1	10	30†	50†	120†
BSY20	INT	NPN	17				1	10	20†	40†	60†
BSY21	INT TFN	NPN	17								
BSY22	INT	NPN	17				1	10	50†		200†
BSY23	INT	NPN	17				1	10	25†	40†	
BSY24	STC	NPN	13	20	10mA	2	9	20	10	30	
BSY25	STC	NPN	13	20	10mA	2	9	20	20	60	
BSY26	STC	NPN	13	9	10mA	100nA	2	10	20†	32†	60†
BSY27	STC	NPN	13				2	10	40†	55†	120†
BSY28	STC	NPN	13	9	10mA	100nA	2	10	20†	34†	60†
BSY29	STC	NPN	13	9	10mA	100nA	2	10	40†	54†	120†
BSY34	SH	NPN	17				1	100	25†	42†	
BSY38	RAD MULL PHIL	NPN	17				1	100	15†		45†
BSY39	RAD MULL PHIL	NPN	17				1	100	20†		70†
BSY40	MULL	PNP	17				0.35	10	20†		120†
BSY41	MULL	PNP	17				0.35	10	40†		120†
BSY44	TFN	NPN	17				10	5	35	112	150
BSY45	TFN	NPN	17				5	1	30		100
BSY46	TFN	NPN	17				10	5		94	
BSY51	INT BC	NPN	17				5	1	30		100
BSY52	INT BC	NPN	17				5	1	50		200
BSY53	INT BC	NPN	17				10	5	35		150
BSY54	INT BC	NPN	17				5	1	50		250
BSY55	INT BC	NPN	17				5	1	30		150
BSY56	BC	NPN	17				5	1	60		280
BSY58	SH	NPN	17				1	100	17†	42†	
BSY62	SH	NPN	17				1	10	20†		60†
BSY63	SH	NPN	17				1	10	40†		120†
BSY68	RAD	NPN	17					10		20†	
BSY70	TFN	NPN	17				1	10	20†		
BSY71	TFN	NPN	17				10	5	70	150	300
BSY81	BC INT	NPN	17								
BSY82	BC INT	NPN	17								
BSY83	BC INT	NPN	17								
BSY84	BC INT	NPN	17								
BSY85	BC INT	NPN	17								
BSY86	BC INT	NPN	17								
BSY87	BC	NPN	17				5	1	30		150
BSY88	BC	NPN	17				5	1	60		280
BSY95	STC	NPN	17				0.35	10	50†		200†
BUY10	STC	NPN	16	20	10nA	2	9	20	10	30	
BUY11	STC	NPN	16	20	10nA	2	9	20	20	60	
BUY12	SH	NPN	16				1.7	8A	10†	21†	
BUY13	SH	NPN	16				1.7	6A	11†	25†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
10	5	20	30		800		BSX30
			6		300		BSX35
			60	50	300		BSY10
			45	50	300		BSY11
			12	200	1.0W		BSY17
10	5	20	15	200	235		BSY18
			15	200	320		BSY19
			15	50	300		BSY20
			15	500	360		BSY21
			25	200	360		BSY22
			30	200	300		BSY23
			20	500	600		BSY24
			20	500	600		BSY25
			15	100	300		BSY26
			15	100	300		BSY27
1.5	0.1	6	12	100	300		BSY28
			12	100	300		BSY29
			40	600	2.6W		BSY34
			15	100	300		BSY38
			15	100	300		BSY39
			15	100	250		BSY40
			15	100	250		BSY41
			50		700		BSY44
			80		700		BSY45
			50		700		BSY46
1.5	0.1	6	25	500	800		BSY51
			25	500	800		BSY52
			30	750	800		BSY53
			30	750	800		BSY54
			80	500	800		BSY55
			80	500	800		BSY56
			25	600	2.6W		BSY58
			15	200	860		BSY62
			15	200	1.0W		BSY63
				50	300		BSY68
1.5	0.1	6			260		BSY70
			28		700		BSY71
			40	1A	900		BSY81
			40	1A	900		BSY82
			80	1A	900		BSY83
			80	1A	900		BSY84
			120	1A	900		BSY85
			120	1A	900		BSY86
			60	500	800		BSY87
			60	500	800		BSY88
1.5	0.1	6	15	100	150		BSY95
			20	500	2.5W†		BUY10
			20	500	2.5		BUY11
			80	10A	15.0W†		BUY12
			70	8A	50.0W†		BUY13

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
BX123	BC	PNP					2	1	30	70	
C63	SGS	NPN	17				5	5	40	90	150
C64	SGS	NPN	17				5	5	65	130	250
C65	SGS	NPN	17				5	5	40	90	150
C66	SGS	NPN	17				5	5	65	130	250
C101	CRY	PNP	13				6	1		11	
C102	CRY	PNP	13				6	1		15	
C103	CRY	PNP	13				6	1		23	
C106	CRY	PNP	17				6	1		50	
C111	SGS	NPN	17								
C111E	SGS	NPN	17								
C112	CRY	PNP	13				6	1		18	
C118	CRY	PNP	13				3	10 μ A		17	
C119	CRY	PNP	13				3	10 μ A		30	
C201	CRY	PNP	13								
C202	CRY	PNP	13				6	1		15	
C301	CRY	PNP	13								
C302	CRY	PNP	13				6	1		15	
C400	SGS	NPN	17				5	5		70	
C401	CRY	PNP	13				6	1		3	
C402	CRY	PNP	13				6	1		15	
C407	SGS	NPN	13				10	3	18†	35†	
C420	SGS	NPN	17				5	5		70	
C424	SGS	NPN	13								
C425	SGS	NPN	17				10	5	35	75	
C426	SGS	NPN	17				5	1		60	
C444	SGS	NPN	17				5	5	35	80	
CA2D2	MH	PNP	27				2	2A	20†		
CB1F4	MH	PNP	27								
CD91	CRY	PNP	102				10	1 μ A	50†		
CD92	CRY	PNP	102				10	1 μ A	50†		
CD93	CRY	PNP	102				10	1 μ A	50†		
CD94	CRY	PNP	102				10	1 μ A	50†		
CD95	CRY	PNP	102				10	1 μ A	100†		
CD96	CRY	PNP	102				10	1 μ A	100†		
CD97	CRY	PNP	102				10	1 μ A	100†		
CD98	CRY	PNP	102				10	1 μ A	100†		
CD912	CRY	PNP	17				10	1 μ A	50†		
CD922	CRY	PNP	17				10	1 μ A	50†		
CD932	CRY	PNP	17				10	1 μ A	50†		
CD942	CRY	PNP	17				10	1 μ A	50†		
CD952	CRY	PNP	17				10	1 μ A	100†		
CD962	CRY	PNP	17				10	1 μ A	100†		
CD972	CRY	PNP	17				10	1 μ A	100†		
CD982	CRY	PNP	17				10	1 μ A	100†		
CDQ10051	CDC	NPN	13				6	500	20†	35†	80†
CDQ10052	CDC	PNP	16				6	500	20†	35†	80†
CDQ10053	CDC	NPN	13				6	200	20†	35†	80†
CDQ10054	CDC	NPN	13				6	200	20†	35†	80†
CDQ10055	CDC	NPN	13				6	50	20†	30†	80†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
0.5	12		3	5	20		BX123
			45		360		C63
			45		360		C64
			60		360		C65
			60		360		C66
			20	50	250		C101
			15	50	250		C102
			10	50	250		C103
			10	50	250		C106
			12		300		C111
			12		300		C111E
			25	50	250		C112
			6	50	250		C118
			6	50	250		C119
			40	50	250		C201
			12	50	250		C202
			70	50	250		C301
			8	50	250		C302
			30		400		C400
			40	50	250		C401
			10	50	250		C402
			120		200		C407
			28		800		C420
			30		300		C424
			60		300		C425
			30		800		C426
			35		300		C444
				3.5A			CA2D2
			30	3.5A			CBIF4
			30	50	400		CD91
			30	50	400		CD92
			30	50	400		CD93
			30	50	400		CD94
			30	50	400		CD95
			30	50	400		CD96
			30	50	400		CD97
			30	50	400		CD98
			30	50	400		CD912
			30	50	400		CD922
			30	50	400		CD932
			30	50	400		CD942
			30	50	400		CD952
			30	50	400		CD962
			30	50	400		CD972
			30	50	400		CD982
			60		5.0W†		CDQ10051
			80	5A	5.0W†		CDQ10052
			60		5.0W†		CDQ10053
			30		5.0W†		CDQ10054
			60		3.0W†		CDQ10055

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
CDQ10056	CDC	NPN	13				6	50	20†	30†	80†
CDQ10057	CDC	PNP	13				6	500	40†	65†	
CDQ10058	CDC	NPN	13				6	200	40†	65†	
CDT1309	CLE BC	PNP	16								
CDT1310	CLE BC	PNP	16				3	250		200†	
CDT1311	CLE BC INT	PNP	16				3	250		200†	
CDT1312	CLE BC	PNP	16				3	250		200†	
CDT1313	CLE BC INT	PNP	16				3	250		200†	
CDT1314	CLE BC	PNP	16								
CDT1315	CLE BC	PNP	16								
CDT1319	CLE BC	PNP	16				3	500		53†	
CDT1320	CLE BC	PNP	16				3	500		53†	
CDT1321	CLE BC	PNP	16				3	500		53†	
CDT1322	CLE BC	PNP	16				3	500		53†	
CDT1349	CLE	PNP	16								
CDT1349A	CLE	PNP	16								
CDT1350	CLE	PNP	16				2	2A	10†		
CDT1350A	CLE	PNP	16				2	2A	20†		
CK4	RAY	PNP	62				0.15	0.4	30†	60†	
CK4A	RAY	PNP	62				0.15	0.4	30†	60†	
CK13	RAY	PNP	62				6	1		30	
CK13A	RAY	PNP	62				6	1		30	
CK14	RAY	PNP	62				6	1		60	
CK14A	RAY	PNP	62				6	1		60	
CK16	RAY	PNP	62				6	1		80	
CK16A	RAY	PNP	62				6	1		80	
CK17	RAY	PNP	62				6	1		140	
CK17A	RAY	PNP	62				6	1		140	
CK22	RAY	PNP	62				6	1	54	90	132
CK22A	RAY	PNP	62				6	1	54	90	132
CK22B	RAY	PNP	86				6	1	54	90	200
CK22C	RAY	PNP	106				6	1	54	90	200
CK25	RAY	PNP	62				0.25		20†	30†	40†
CK25A	RAY	PNP	62				0.25		20†	30†	40†
CK26	RAY	PNP	62				0.25		30†	40†	60†
CK26A	RAY	PNP	62				0.25		30†	40†	60†
CK27	RAY	PNP	62				0.25		40†	55†	80†
CK27A	RAY	PNP	62				0.25		40†	55†	80†
CK28	RAY	PNP	62				0.25		60†	80†	
CK28A	RAY	PNP	62				0.25		60†	80†	
CK64	RAY	PNP	62				6	1	13	22	33
CK64A	RAY	PNP	62				6	1	13	22	33
CK64B	RAY	PNP	148				6	1	13	25	45
CK64C	RAY	PNP	106				6	1	13	25	45
CK65	RAY	PNP	62				6	1	27	45	66
CK65A	RAY	PNP	62				6	1	27	45	66
CK65B	RAY	PNP	148				6	1	27	45	66
CK65C	RAY	PNP	106				6	1	27	45	66
CK66	RAY	PNP	62				6	1	54	90	132
CK66A	RAY	PNP	62				6	1	54	90	132

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			60		5.0W†		CDQ10056
			60		5.0W†		CDQ10057
			60		600		CDQ10058
			40	5A	14.0W†		CDT1309
			20	5A	45.0W†		CDT1310
			35	5A	45.0W†		CDT1311
			45	5A	45.0W†		CDT1312
			55	5A	45.0W†		CDT1313
				8A			CDT1314
			80	8A	10.0W†		CDT1315
			20	5A	45.0W†		CDT1319
			35	5A	45.0W†		CDT1320
			45	5A	45.0W†		CDT1321
			55	5A	45.0W†		CDT1322
				3A			CDT1349
			35	3A			CDT1349A
			65	3A	12.0W†		CDT1350
			65	3A	12.0W†		CDT1350A
			24	100			CK4
			24	100			CK4A
			18	200			CK13
			18	200			CK13A
			15	200			CK14
			15	200			CK14A
			12	200			CK16
			12	200			CK16A
			10	200			CK17
			10	200			CK17A
2.5	0.5	6.5*	20	100			CK22
2.5	0.5	6.5*	20	100			CK22A
			15	100	75		CK22B
			15	100	75		CK22C
			20	400			CK25
			20	400			CK25A
			18	400			CK26
			18	400			CK26A
			15	400			CK27
			15	400			CK27A
			12	400			CK28
			12	400			CK28A
2.5	0.5	22*		100			CK64
2.5	0.5	22*		100			CK64A
2.5	0.5	22*		100	75		CK64B
2.5	0.5	22*		100	75		CK64C
2.5	0.5	22*	24	100			CK65
2.5	0.5	22*	24	100			CK65A
2.5	0.5	22*	24	100	75		CK65B
2.5	0.5	22*	24	100	75		CK65C
2.5	0.5	22*	20	100			CK66
2.5	0.5	22*	20	100			CK66A

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I'_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
CK66B	RAY	PNP	148				6	1	54	90	132
CK66C	RAY	PNP	106				6	1	54	90	132
CK67	RAY	PNP	62				6	1	108	180	264
CK67A	RAY	PNP	62				6	1	108	180	264
CK67B	RAY	PNP	86				6	1	108	180	264
CK67C	RAY	PNP	106				6	1	108	180	264
CK83	RAY	PNP	62				6	1		60	
CK86	RAY	PNP	62				6	1		200	
CK256	RAY	PNP	21				2	500	25†		
CK258	RAY	PNP	21				2	500	21†		
CK261	RAY	PNP	86				6	1	54		
CK262	RAY	NPN	106				6	1	54		
CK273	RAY	NPN	17								
CK277	RAY	NPN	17								
CK311	RAY	PNP	21				2	500	21†		
CK312	RAY	PNP	21				2	500	21†		
CK313	RAY	PNP	21				2	500	21†		
CK314	RAY	PNP	21				2	500	21†		
CK315	RAY	PNP	21				2	500	21†		
CK398	RAY	NPN	17				1	5	20†		
CK411	RAY	PNP	21				2	500	21†		
CK412	RAY	PNP	21				2	500	21†		
CK413	RAY	PNP	21				2	500	21†		
CK414	RAY	PNP	21				2	500	21†		
CK415	RAY	PNP	21				2	500	21†		
CK419	RAY	NPN	13				1.5	5	9†	15†	22†
CK420	RAY	NPN	13				1.5	5	18†	30†	44†
CK421	RAY	NPN	13				1.5	5	36†	60†	88†
CK422	RAY	NPN	13				1.5	5	9†	25†	44†
CK474	RAY	NPN	13				5	5	9	15	22
CK475	RAY	NPN	13				5	5	18	28	44
CK476	RAY	NPN	13				5	5	36	60	88
CK477	RAY	NPN	13				5	5	9	25	44
CK754	RAY	PNP	6				6	1		300	
CK759	RAY	PNP	5					1	15	25	45
CK759A	RAY	PNP	5					1	15	25	45
CK760	RAY	PNP	5				6	1		40	
CK760A	RAY	PNP	5					1	15	30	45
CK761	RAY	PNP	5				6	1		45	
CK762	RAY	PNP	5				6	1		75	
CK766	RAY	PNP	5				6	1		45	
CK766A	RAY	PNP	5				6	1		45	
CK798	RAY	PNP						1		20	
CK799	RAY	PNP						1		10	
CK800	RAY	PNP						1		20	
CK870	RAY	PNP					6	1		12	
CK871	RAY	PNP					6	1		20	
CK891	RAY	PNP	62				1.5	0.5		100	
CK892	RAY	PNP	62				1.5	0.5		100	
CK896	RAY	PNP	62				1.5	0.5	30	50	80

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
2.5	0.5	22*	20	100	75		CK66B
2.5	0.5	22*	20	100	75		CK66C
2.5	0.5	22*	15	100			CK67
2.5	0.5	22*	15	100			CK67A
2.5	0.5	22*	15	100	75		CK67B
2.5	0.5	22*	15	100	75		CK67C
			12	20	75		CK83
			12	10	75		CK86
			30	3A	20.0W†		CK256
			60	3A	20.0W†		CK258
2.5	0.5	5*	20	100	75		CK261
2.5	0.5	5*	20	100	75		CK262
					250		CK273
					250		CK277
			60	3A	20.0W†		CK311
			60	3A	20.0W†		CK312
			60	3A	20.0W†		CK313
			60	3A	20.0W†		CK314
			60	3A	20.0W†		CK315
			50		250		CK398
			60	3A	20.0W†		CK411
			60	3A	20.0W†		CK412
			60	3A	20.0W†		CK413
			60	3A	20.0W†		CK414
			60	3A	20.0W†		CK415
6	1	15	40	50			CK419
6	1	15	35	50			CK420
6	1	15	30	50			CK421
6	0.1	8	35	50			CK422
6	1	18	40	50			CK474
6	1	18	35	50			CK475
6	1	18	30	50			CK476
6	0.1	8	35	50			CK477
			10	100	100		CK754
			15	200	150		CK759
			15	200	150		CK759A
			6	5			CK760
			15	200			CK760A
2.5	0.5	10	10	200			CK761
2.5	0.5	10	10	200			CK762
6	1	4.5	10	200			CK766
9	0.5	4.5	10	200			CK766A
		18*		5	250		CK798
		18*		5	250		CK799
				5	200		CK800
				150	130		CK870
				150	130		CK871
2.5	0.5	6	6	50	40		CK891
2.5	0.5	12	6	50	40		CK892
2.5	0.5	12	6	50	30		CK896

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
CK896A	RAY	PNP	62				1.5	0.5	30	50	80
CK897	RAY	PNP	62				1.5	0.5	60	100	160
CK897A	RAY	PNP	62				1.5	0.5	60	100	150
CK898	RAY	PNP	62				1.5	0.5	120	200	320
CK898A	RAY	PNP	62				1.5	0.5	120	200	320
CK914	RAY	PNP	13				6	1	33		360
CK942	RAY	PNP	13				6	1		14	
CP98	CPC	PNP	17				0.2	30		30†	
CP398	CPC	PNP	17				0.35	5		30†	
CP800	CPC	PNP	17				0.5	1A		20†	
CP801	CPC	PNP	17				0.5	1A		30†	
CP802	CPC	PNP	17				0.5	1A		30	
CP803	CPC	PNP	17				0.5	1A		50	
CRT1592	INT	PNP	16				4	25A	12†		
CSP21	MSD	NPN	17	10		1 μA	10	200	12†		
CSP22	MSD	NPN	17	10		1 μA	10	200	30†		
CSP23	MSD	NPN	17	10		1 μA	10	200	75†		
CSP41	MSD	NPN	17	20		1 μA	10	200	12†		
CSP42	MSD	NPN	17	20		1 μA	10	200	30†		
CSP43	MSD	NPN	17	20		1 μA	10	200	75†		
CSP61	MSD	NPN	17	30		1 μA	10	200	12†		
CSP61C	MSD	NPN	17	30		1 μA	10	200	15†		50†
CSP62	MSD	NPN	17	30		1 μA	10	200	30†		
CSP62C	MSD	NPN	17	30		1 μA	10	200	40†		120†
CSP63	MSD	NPN	17	30		1 μA	10	200	75†		
CSP63C	MSD	NPN	17	30		1 μA	10	200	100†		400†
CSP81C	MSD	NPN	17	40		1 μA	10	200	15†		50†
CSP82C	MSD	NPN	17	40		1 μA	10	200	40†		120†
CSP83C	MSD	NPN	17	40		1 μA	10	200	100†		400†
CST1739	CLE BC	PNP	63								
CST1740	CLE BC	PNP	63								
CST1741	CLE BC	PNP	63								
CST1742	CLE BC	PNP	63								
CST1743	CLE BC	PNP	63								
CST1744	CLE BC	PNP	63								
CST1745	CLE BC	PNP	63								
CST1746	CLE BC	PNP	63								
CST1789	CLE	PNP					2	500	30†		75†
CTP1104	INT CLE	PNP	16				2	2A	10†		
CTP1108	INT CLE	PNP	16								
CTP1109	INT CLE	PNP	16				2	2A	20†		
CTP1111	INT CLE	PNP	16				2	2A	10†	20†	
CTP1112	CLE	PNP	16					2A	20†		
CTP1117	CLE	PNP	16				2	1A		100†	
CTP1127	CLE	PNP	16								
CTP1133	CLE	PNP	16					500		40†	
CTP1135	CLE	PNP	16				2	500	40†		
CTP1136	CLE	PNP	16				2	500	40†		
CTP1137	CLE	PNP	16					500		75†	
CTP1222	CLE	PNP									

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
2.5	0.5	6	6	50	30		CK896A
2.5	0.5	12	6	50	30		CK897
2.5	0.5	6	6	50	30		CK897A
2.5	0.5	12	3	50	30		CK898
2.5	0.5	6	3	50	30		CK898A
2.5	0.5	23*					CK914
6	1	18	20	50	250		CK942
				300	150		CP98
				100	120		CP398
				1.5A	300		CP800
				1.5A	300		CP801
				1.5A	300		CP802
				1.5A	300		CP803
			60	35A			CRT1592
			20	500	800		CSP21
			20	500	800		CSP22
			20	500	800		CSP23
			40	500	800		CSP41
			40	500	800		CSP42
			40	500	800		CSP43
			60	500	800		CSP61
			60	500	800		CSP61C
			60	500	800		CSP62
			60	500	800		CSP62C
			60	500	800		CSP63
			60	500	800		CSP63C
			80	500	800		CSP81C
			80	500	800		CSP82C
			80	500	800		CSP83C
			20	3A	30.0W†		CST1739
			20	3A	30.0W†		CST1740
			20	3A	30.0W†		CST1741
			20	3A	30.0W†		CST1742
			20	3A	30.0W†		CST1743
			40	3A	30.0W†		CST1744
			40	3A	30.0W†		CST1745
			40	3A	30.0W†		CST1746
			90	3A	28.0W†		CST1789
			25	3A	1.3W		CTP1104
			12	4A	1.3W		CTP1108
			20	3A	1.3W		CTP1109
			40	3A	45.0W†		CTP1111
			75	3A			CTP1112
			40	3A	40.0W†		CTP1117
			60				CTP1127
			40		40.0W†		CTP1133
			40		40.0W†		CTP1135
			60		40.0W†		CTP1136
			40				CTP1137
				5A			CTP1222

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
CTP1265	CLE BC	PNP	16								
CTP1266	CLE BC	PNP	16								
CTP1296	CLE BC	PNP	16								
CTP1297	CLE BC	PNP	16								
CTP1306	CLE BC	PNP	16								
CTP1307	CLE BC	PNP	16				2	5A	60†		150†
CTP1500	CLE BC INT	PNP	16				2	5A	30†	50†	75†
CTP1503	CLE BC	PNP	16				2	5A	30†	50†	75†
CTP1504	CLE BC	PNP	16				2	5A	30†	50†	75†
CTP1506	CLE	PNP	16								
CTP1508	CLE BC INT	PNP	16				2	5A	30†	50†	75†
CTP1511	CLE	PNP	16				1.5				
CTP1512	CLE	PNP	16								
CTP1513	CLE	PNP	16								
CTP1514	CLE	PNP	16								
CTP1530	CLE	PNP	16								
CTP1544	CLE BC INT	PNP	16				2	25A	25†		125†
CTP1545	CLE BC INT	PNP	16				2	25A	25†		125†
CTP1550	CLE	PNP	16				2	5A	30†		200†
CTP1551	CLE	PNP	16				2	5A	30†		200†
CTP1552	CLE BC INT	PNP	16				2	25A	25†		125†
CTP1553	CLE BC INT	PNP	16				2	25A	25†		125†
CTP1728	CLE BC	PNP	63				2	500	30†	50†	75†
CTP1729	CLE BC	PNP	63				2	500	30†	50†	75†
CTP1730	CLE BC	PNP	63				1	500	30†	50†	75†
CTP1731	CLE BC	PNP	63				2	500	60†	100†	150†
CTP1732	CLE BC	PNP	63				2	500	60†	100†	150†
CTP1733	CLE BC	PNP	63				2	500	60†	100†	150†
CTP1735	CLE BC	PNP	63				2	500	30†	50†	75†
CTP1736	CLE BC	PNP	63				2	500	60†	100†	150†
CTP3500	CLE BC	PNP	16				2	5A	30†	50†	75†
CTP3503	CLE BC	PNP	16				2	5A	30†	50†	75†
CTP3504	CLE BC	PNP	16				2	5A	30†	50†	75†
CTP3508	CLE BC	PNP	16				2	5A	30†	50†	75†
CTP3544	CLE BC	PNP	16								
CTP3545	CLE BC	PNP	16								
CTP3552	CLE BC	PNP	16								
CTP3553	CLE BC	PNP	16								
DA3F3	MH	PNP	56								
DT11	JL	NPN	17				6	300	20†	40†	60†
DT31	JL	NPN	16				6	1.5A	20†	40†	60†
DT41	JL	NPN	16				6	5A	10†	20†	
DT80	DEL	PNP	25								
DT100	DEL	PNP	25								
DT110	JL	NPN	17				6	300	20†	40†	60†
DT111	JL	NPN	17				6	300	20†	40†	60†
DT161	JL	NPN	13				10	40	15		
DT310	JL	NPN	16				6	1.5A	20†	40†	60†
DT311	JL	NPN	16				6	1.5A	20†	40†	60†
DT410	JL	NPN	16				6	5A	10†	20†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
				8A			CTP1265
				8A			CTP1266
				8A			CTP1296
				8A			CTP1297
							CTP1306
			40	5A			CTP1307
			60	15A	70.0W†		CTP1500
			50	13A	70.0W†		CTP1503
			35	13A	70.0W†		CTP1504
				13A	70.0W†		CTP1506
			20	13A	70.0W†		CTP1508
				13A	65.0W†		CTP1511
				13A	65.0W†		CTP1512
				13A	65.0W†		CTP1513
				13A	65.0W†		CTP1514
				13A			CTP1530
			20	25A	75.0W†		CTP1544
			20	25A	75.0W†		CTP1545
			30	12A			CTP1550
			60	12A			CTP1551
			20	25A	75.0W†		CTP1552
			20	25A	75.0W†		CTP1553
			20	3A	30.0W†		CTP1728
			50	3A	30.0W†		CTP1729
			60	5A	30.0W†		CTP1730
			20	5A	30.0W†		CTP1731
			50	5A	30.0W†		CTP1732
			60	5A	30.0W†		CTP1733
			35	3A	30.0W†		CTP1735
			35	5A	30.0W†		CTP1736
			16	15A	75.0W†		CTP3506
			50	15A	75.0W†		CTP3503
			35	15A	75.0W†		CTP3504
			20	15A	75.0W†		CTP3508
			20	25A	75.0W†		CTP3544
			20	25A	75.0W†		CTP3545
			20	25A	75.0W†		CTP3552
			20	25A	75.0W†		CTP3553
			35		100.0W†		DA3F3
			30	500	1.0W		DT11
			30	2A	50.0W†		DT31
			30	5A	50.0W†		DT41
				15A			DT8C
				15A			DT100
			60	500	1.0W		DT110
			100	500	1.0W		DT111
			15	250	600		DT161
			60	2A	50.0W†		DT310
			100	2A	50.0W†		DT311
			60	5A	50.0W†		DT410

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
DT411	JL	NPN	16				6	5A	10†	20†	
DT1003	JL	NPN	17				6	200	12†		36†
DT1110	JL	NPN	17				15	50		45	
DT1111	JL	NPN	17				15	50		45	
DT1112	JL	NPN	17				15	50		45	
DT1120	JL	NPN	17				15	50		90	
DT1121	JL	NPN	17				15	50		90	
DT1122	JL	NPN	17				15	50		90	
DT1510	JL	NPN	17				15	50		25	
DT1511	JL	NPN	17				15	50		25	
DT1512	JL	NPN	17				15	50		25	
DT1520	JL	NPN	17				6	300	50†		200†
DT1521	JL	NPN	17				6	300	50†		200†
DT1522	JL	NPN	17				6	300	50†		200†
DT1602	JL	NPN	17				5	3	5†		
DT1603	JL	NPN	17				5	3	5†		
DT1610	JL	NPN	17				6	200	10†		
DT1612	JL	NPN	17				5	3	20†		
DT1613	JL	NPN	17				5	3	20†		
DT3200	JL	NPN	76				5	3A	15†		45†
DT3201	JL	NPN	76				5	3A	15†		45†
DT4110	JL	NPN	16				6	1.5A	15†		45†
DT4111	JL	NPN	16				6	1.5A	15†		45†
DT4112	JL	NPN	16				6	1.5A	15†		45†
DT4120	JL	NPN	16				6	1.5A	30†	50†	90†
DT4121	JL	NPN	16				6	1.5A	30†	50†	90†
DT4303	JL	NPN	16				5	3A	10†	18†	50†
DT4304	JL	NPN	16				5	3A	10†	18†	50†
DT4305	JL	NPN	16				5	3A	10†	18†	50†
DT4306	JL	NPN	16				5	3A	10†	18†	50†
DT6103	JL	NPN	25				5	5A	10†	17†	50†
DT6104	JL	NPN	25				5	5A	10†	17†	50†
DT6105	JL	NPN	25				5	5A	10†	17†	50†
DT6106	JL	NPN	25				5	5A	10†	17†	50†
DTG1000	DEL	PNP									
DTG1010	DEL	PNP	16								
DTG1110	DEL	PNP	16								
DTG1200	DEL	PNP	16	120		100mA	0.5	8A	22†		
DTG2000	DEL	PNP	16	30		100mA	2	8A	25†		
DTG2100	DEL	PNP	16	60		100mA	2	8A	25†		
DTG2200	DEL	PNP	16	80		100mA	2	8A	25†		
DTG2300	DEL	PNP	16	100		100mA	2	8A	25†		
DTG2400	DEL	PNP	16	120		100mA	2	8A	25†		
ES3110	EBA	PNP	14				5	1	9	12	16
ES3111	EBA	PNP	14				5	1	13	19	24
ES3112	EBA	PNP	14				5	1	20	28	36
ES3113	EBA	PNP	14				5	1	30	39	51
ES3114	EBA	PNP	14				5	1	43	59	75
ES3115	EBA	PNP	14				5	1	62	86	110
ES3116	EBA	PNP	14				5	1	90	120	160

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			100	5A	50.0W†		DT411
			200	300	600		DT1003
			30	500	1.0W		DT1110
			60	500	1.0W		DT1111
			100	500	1.0W		DT1112
			30	500	1.0W		DT1120
			60	500	1.0W		DT1121
			100	500	1.0W		DT1122
			20	300	800		DT1510
			40	300	800		DT1511
			70	300	800		DT1512
			20		800		DT1520
			40	1A	800		DT1521
			70	1A	800		DT1522
			75	25	100		DT1602
			150	25	100		DT1603
			15	250	600		DT1610
			75	25	100		DT1612
			150	250	100		DT1613
			30	5A	15.0W†		DT3200
			60	5A	15.0W†		DT3201
			30	5A	30.0W†		DT4110
			60	5A	30.0W†		DT4111
			100	5A	30.0W†		DT4112
			30	5A	30.0W†		DT4120
			60	5A	30.0W†		DT4121
			135	5A	30.0W†		DT4303
			200	5A	30.0W†		DT4304
			265	5A	36.0W†		DT4305
			325	5A	36.0W†		DT4306
			135		50.0W†		DT6103
			200		50.0W†		DT6104
			265	10A	50.0W†		DT6105
			325	10A	50.0W†		DT6106
			100	15A			DTG1000
			325	15A			DTG1010
			200	15A			DTG1110
			120	15A			DTG1200
			50	25A			DTG2000
			80	25A			DTG2100
			100	25A			DTG2200
			120	25A			DTG2300
			140	25A			DTG2400
2	0.5	13*	15	10	27		ES3110
2	0.5	13*	15	10	27		ES3111
2	0.5	13*	15	10	27		ES3112
2	0.5	10*	15	10	27		ES3113
2	0.5	10*	15	10	27		ES3114
2	0.5	10*	15	10	27		ES3115
2	0.5	10*	15	10	27		ES3116

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
ES3120	EBA	PNP	17				5	1	9	12	16
ES3121	EBA	PNP	17				5	1	13	19	24
ES3122	EBA	PNP	17				5	1	20	28	36
ES3123	EBA	PNP	17				5	1	30	39	51
ES3124	EBA	PNP	17				5	1	43	59	75
ES3125	EBA	PNP	17				5	1	62	86	110
ES3126	EBA	PNP	17				5	1	91	120	160
ES3501	EBA	PNP					5	1		50	
EW51	GEC	PNP (PC)	43				5	1	2	3	
EW53/1	GEC	PNP	43				5	1	15	25	
EW53/2	GEC	PNP	43				5	1	30	40	
EW57/1	GEC	PNP	42				6	100		40	
EW58/1	GEC	PNP	43				4.5	1	15	25	
EW58/2	GEC	PNP	43				4.5	1	30	40	
EW59	GEC	PNP	43				4.5	1	15	30	
EW69	GEC	PNP								50	
EW70	GEC	PNP	41				3	0.5		50	
EW721	GEC	NPN					6	1		15	
EW722	GEC	NPN					6	1		30	
EW723	GEC	NPN					6	1		50	
F101	FAN	NPN	75				15	1A	10†		50†
F102	FAN	NPN	75				15	1A	10†		50†
F103	FAN	NPN	75				15	1A	10†		50†
F104	FAN	NPN	16				15	1A	10†		50†
F105	FAN	NPN	16				15	1A	10†		50†
F106	FAN	NPN	16				15	1A	10†		50†
F107	FAN	NPN	35				15	1A	10†		50†
F108	FAN	NPN	35				15	1A	10†		50†
F109	FAN	NPN	35				15	1A	10†		50†
F110	FAN	NPN	35				15	1A	10†		50†
F111	FAN	NPN	35				15	2A	10†		50†
F112	FAN	NPN	75				15	2A	10†		50†
F113	FAN	NPN	75				15	2A	10†		50†
F114	FAN	NPN	35				15	2A	10†		50†
F115	FAN	NPN	16				15	2A	10†		50†
F116	FAN	NPN	16				15	2A	10†		50†
FM870	FC	NPN	17				5	1	30	72	100
FM871	FC	NPN	17				5	1	50	125	20
FSP1	FC	NPN	113				10	50		85†	
FSP2	SGS	NPN	102								
FSP5	FC	NPN	17								
FSP15	FC		102								
FSP22	FC	NPN	13				5	10	1600†	2500†	10000†
FSP24	FC		102								
FSP42	FC	NPN	130				1	10	40†	70†	100†
FSP42-1	FC	NPN	130				1	10	80†	120†	200†
FSP164	FC	NPN	130				1	10	20†		120†
FSP165	FC	NPN	130				1	10	30†		120†
FSP166	FC	NPN	130				1	10	40†	70†	100†
FSP166-1	FC	NPN	130				1	10	80†	120†	200†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
2	0.5	13*	15	10	36		ES3120
2	0.5	13*	15	10	36		ES3121
2	0.5	13*	15	10	36		ES3122
2	0.5	10*	15	10	36		ES3123
2	0.5	10*	15	10	36		ES3124
2	0.5	10*	15	10	36		ES3125
2	0.5	10*	15	10	36		ES3126
2	0.5	10	10	10	36		ES3501
			1.3	2.5			EW51
			10	20	70		EW53/1
			10	20	70		EW53/2
			15	8A			EW57/1
4.5	1	12	5	20	70		EW58/1
4.5	1	12	5	20	70		EW58/2
			20	20	70		EW59
				10	35		EW69
			20	50	200		EW70
				25	250		EW721
				25	250		EW722
				25	250		EW723
				4A	85.0W†		F101
				4A	85.0W†		F102
				4A	85.0W†		F103
				4A	75.0W†		F104
				4A	75.0W†		F105
				4A	75.0W†		F106
				4A	85.0W†		F107
				4A	85.0W†		F108
				4A	85.0W†		F109
				4A	85.0W†		F110
				7.5A	85.0W†		F111
				7.5A	85.0W†		F112
				7.5A	85.0W†		F113
				7.5A	85.0W†		F114
				7.5A	75.0W†		F115
				7.5A	75.0W†		F116
			60		375		FM870
			60		375		FM871
			20		800		FSP1
					300		FSP2
							FSP5
							FSP15
			60		500		FSP22
							FSP24
			30		200		FSP42
			30		200		FSP42-1
			5		100		FSP164
			15		125		FSP165
			60		200		FSP166
			60		200		FSP166-1

TYPICAL NOISE			MAX. RATINGS			REMARKS					TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW						
FSP215	FC			NPN	130			1	3	20†	40†
FSP242-1	FC			NPN	130			1	10	40†	80† 160†
FSP270-1	FC			PNP	130			1	10	35†	75† 140†
FSP288-1	FC										
FSP289-1	FC			NP	130			1	10	40†	80† 160†
FT001	LTT			NPN	13	30	1μA 100μA	15	6	20	50
FT002	LTT			NPN	13	30	1μA 100μA	15	6	45	115
FT003	LTT			NPN	13	30	1μA 100μA	15	6	20	50
FT004	LTT			NPN	13	30	1μA 100μA	15	6	45	115
FT004A	LTT			NPN	17			6	1	80	
FT005	LTT			NPN	13	25	1μA 100μA	15	6		35
FT006	LTT			NPN	13	25	1μA 100μA	15	6		70
FT709	FC			PNP	17			0.4	10	30†	70† 125†
FT1210	FC			NPN	13			1	3	20†	50†
FT6200	FC			NPN	13						
GA52819	WE			PNP				4.5	1		150
GA52830	WE			PNP				4.5	20		215
GA53080	WE			PNP(FC)							
GA53104	WE			PNP							45
GA53149	WE			PNP				4.5	1		49
GA53194	WE			PNP				10.5	10		19
GA53213	WE			PNP				4.5	1		24
GA53242	WE			PNP				1.5	200	45†	80† 133†
GA53270	WE			NPN				4.5	1		49
GAT1000	HA			NPN	124				10	40†	120†
GAT1001	HA			NPN	124				10	30†	120†
GAT1002	HA			NPN	124				10	20†	
GAT1003	HA			NPN	124				10	100†	300†
GAT2000	HA			PNP	124				10	40†	150†
GAT2001	HA			PNP	124				10	30†	120†
GAT2002	HA			PNP	124				10	20†	
GET1	GEC			PNP(FC)							
GET2	GEC			PNP	36			6	1	60	100 160
GET3	GEC			PNP	24			6	1	35	55 80
GET4	GEC			PNP	24			6	1	35	55 80
GET5	GEC			PNP	41			3	0.5		50
GET6	GEC			PNP	24			3	1	30	55 80
GET7	GEC			PNP	42			6	100		40†
GET8	GEC			PNP	42			12	100		40†
GET9	GEC			PNP	42			24	100		40†
GET15	GEC			PNP				4.5	50	30	60 90
GET16	GEC			PNP				4.5	50	30	60 90
GET20	GEC			PNP				4.5	50	30	60 90
GET102	GEC			PNP	36			6	1	60	100 160
GET103	GEC			PNP	24			6	1	30	55 80
GET104	GEC			PNP	24			6	1	35	55 80
GET105	GEC			PNP	24			4.5	50	40†	60† 90†
GET106	GEC RO			PNP	24			3	1	30	55 80
GET110	GEC			PNP	24			4.5	50	40	60 90
GET111	GEC			PNP	36			3	1	30	55 80

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			15		100		FSP215
			25		125		FSP242-1
			15		125		FSP270-1
			50		125		FSP288-1
							FSP289-1
			30	300	600		FT001
			30	300	600		FT002
			30	100	600		FT003
			30	100	600		FT004
			30	100	600		FT004A
			25	75	400		FT005
			25	75	400		FT006
			6		300		FT709
			15		200		FT1210
			40		30.0W†		FT6200
				50			GA52819
				500			GA52830
				50			GA53080
				50	120		GA53104
		15		50	120		GA53149
				30	100		GA53194
		25*		50	120		GA53213
				500			GA53242
				50	50		GA53270
			15		200†		GAT1000
			15		200†		GAT1001
			8		200†		GAT1002
			8		200†		GAT1003
			15		200†		GAT2000
			15		200†		GAT2001
			12		200†		GAT2002
			50	50	100		GET1
			15	75			GET2
2	0.5	9	6	25	50		GET3
2	0.5	9	15	35	50		GET4
			20	50	200		GET5
			12	50	50		GET6
			15	8A			GET7
			30	8A			GET8
			40	8A			GET9
			15	350	600		GET15
			30	350	600		GET16
			30	500	600		GET20
2	0.5	7	30	1A	200		GET102
3	0.5	7	20	250	200		GET103
			30	250	200		GET104
			40	350	440		GET105
2	0.5	5	15		150		GET106
			40	500	330		GET110
			60	1A	200		GET111

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
GET113	GEC	PNP	36				3	1	60	100	160
GET114	GEC	PNP	36				6	1	35	55	95
GET115	GEC	PNP	24				4.5	50	30	60	90
GET116	GEC	PNP	24				4.5	50	30	60	90
GET120	GEC	PNP	24				4.5	50	40	60	90
GET535	GEC	PNP	13				6	1	45		110
GET536	GEC	PNP	13				6	1	90		220
GET538	GEC	PNP	13				6	1	45		110
GET571	GEC	PNP	42				1.5	1A		45†	
GET572	GEC	PNP	42				1.5	1A		45†	
GET573	GEC	PNP	42				1.5	1A		45†	
GET574	GEC	PNP	42				2	1A		40†	
GET671	IMP	PNP						1			
GET672	IMP	PNP						1		60	
GET673	IMP	PNP						1		60	
GET691	GEC	PNP	36				6	1	20	60	200
GET692	GEC	PNP	36				6	1	20	60	100
GET693	GEC	PNP	36				6	1		60	
GET870	GEC	PNP	36				6	1		75	
GET871	GEC	PNP	36				1.5	25	20	30	65
GET872	GEC	PNP	36				1.5	25	30	60	150
GET873	GEC	PNP	36				6	1	20	60	200
GET874	GEC	PNP	36				6	1	40	70	200
GET875	GEC	PNP	36				4.5	1		90†	
GET876	GEC	PNP									
GET880	GEC	PNP	17				6	1	45		100
GET881	GEC MULL	PNP	17				6	1	45		
GET882	GEC MULL	PNP	17				6	1	45		
GET883	GEC	PNP	17				6	1		50	
GET884	GEC	PNP	17				6	1		70	
GET885	GEC MULL	PNP	17				6	1	45		
GET887	GEC MULL	PNP	17				6	1	45		110
GET888	GEC MULL	PNP	17				6	1	90		220
GET889	GEC	PNP	17				6	1	45		110
GET890	GEC	PNP	17				6	1	9		220
GET891	GEC MULL	PNP	17				6	1	45		
GET892	GEC MULL	PNP	17				6	1	45		
GET895	MULL	PNP	17				0.25	5	60†	220†	400†
GET896	MULL	PNP	17				6	1	25	40	55
GET897	MULL	PNP	17				6	1	45	72	110
GET898	MULL	PNP	17				6	1	90	120	270
GET931	GEC	PNP	17				6	1		20	
GF45017	WE	PNP					1.5	200	45†	80†	133†
GPT20	TK	PNP	13	3		300 μA	1	2	20	35	60
GPT20/15	TK	PNP	13	3		300 μA	1	2	20	35	60
GPT20/30	TK	PNP	13	3		300 μA	1	2	20	35	60
GPT20/60	TK	PNP	13	3		300 μA	1	2	20	35	60
GP20R	TK	PNP	13	3		300 μA	1	2	20	35	60
GPT21	TK	PNP	13	3		500 μA	1	2	60	90	120
GPT21/15	TK	PNP	13	3		500 μA	1	2	60	90	120

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
2	0.5	5	15	250	200		GET113
2	0.5	7	15	1A	200		GET114
			15	350	440		GET115
			20	350	440		GET116
			12	500	440		GET120
							GET535
							GET536
							GET538
			16	12A	4.0W†		GET571
			32	12A	20.0W†		GET572
			64	12A	20.0W†		GET573
			32	12A			GET574
				10	75		GET671
				10	75		GET672
				10	75		GET673
			15	10	45		GET691
		20*	15	10	45		GET692
		20*		10	45		GET693
				10	55		GET870
			12	25	55		GET871
			10	25	55		GET872
3	0.5	3.5	10	10	55		GET873
3	0.5	3.5	10	10	55		GET874
			15	150	75		GET875
		3	15	10	60		GET876
2	0.5	3	10	100	100		GET880
			10		120		GET881
			15		120		GET882
			15	10	60		GET883
							GET884
			15		120		GET885
2	0.5	5	10	100	120		GET887
2	0.5	5	10	100	120		GET888
2	0.5	5	10	100	120		GET889
2	0.5	5	10	100	120		GET890
			20		120		GET891
			20		120		GET892
			20	500	120		GET895
2	0.5	5	15	100	120		GET896
2	0.5	5	15	100	120		GET897
2	0.5	5	15	100	120		GET898
				100	75		GET931
				500			GF45017
1.0	0.2	4	7.5	20	50		GFT20
1.0	0.2	4	15	20	80		GFT20/15
1.0	0.2	4	30	20	80		GFT20/30
1.0	0.2	4			80		GFT20/60
1.0	0.2	5*			80		GFT20R
1.0	0.2	4	7.5	20	50		GFT21
1.0	0.2	4	15	20	80		GFT21/15

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
GFT21/30	TK	PNP	13	3		500 μ A	1	2	60	90	120
GFT21/60	TK	PNP	13	3		500 μ A	1	2	60	90	120
GFT21R	TK	PNP	13	3		500 μ A	1	2	60	90	120
GFT22	TK	PNP	13	3		600 μ A	3	5		150	
GFT22/30	TK	PNP	13				3	5		150	
GFT22/60	TK	PNP	13				3	5		150	
GFT22R	TK	PNP	13	3		600 μ A	3	5		150	
GFT25	TK	PNP	13	3		400 μ A	1	2	4	60	80
GFT25/15	TK	PNP	13	3		400 μ A	1	2	40	60	80
GFT25/30	TK	PNP	13	3		400 μ A	1	2	40	60	80
GFT25/60	TK	PNP	13	3		400 μ A	1	2	40	60	80
GFT25R	TK	PNP	13	3		400 μ A	3	2		50	
GFT31	TK	PNP	13	3		500 μ A	3	30	20	30	40
GFT31/30	TK	PNP	13				3	30	20	30	40
GFT31/60	TK	PNP	13				3	30	20	30	40
GFT32	TK	PNP	13	3	200 μ A	400 μ A	1	2	27	34	44
GFT32/30	TK	PNP	13	3	200 μ A	400 μ A	1	2	27	34	44
GFT32/60	TK	PNP	13	3	200 μ A	400 μ A	1	2	27	34	44
GFT34	TK	PNP	13	3	400 μ A	1mA	1	2	60	80	125
GFT34/15	TK	PNP	13	3	400 μ A	1mA	1	2	60	80	125
GFT34/30	TK	PNP	13	3	400 μ A	1mA	1	2	60	80	125
GFT34/60	TK	PNP	13	3	400 μ A	1mA	1	2	60	80	125
GFT41	TK	PNP	1	3	350 μ A	1mA	3	0.6	30†	80†	
GFT42A	TK	PNP	1	3	350 μ A	1mA	3	0.6	30†	80†	
GFT42B	TK	PNP	1	3	350 μ A	1mA	3	0.6	30†	80†	
GFT43	TK	PNP	1								
GFT43A	TK	PNP	1	3	100 μ A	500 μ A	3	0.25	10†	25†	
GFT43B	TK	PNP	1	3	200 μ A	1mA	3	0.6	30†	80†	
GFT44	TK	PNP	33	3		200 μ A	6	0.5	50	100	
GFT44/15E	TK	PNP	1	3	80 μ A	300 μ A	3	0.2	10†	20†	
GFT44/30	TK	PNP	33				6	1		60	
GFT45	TK	PNP	33	3		100 μ A	6	0.5	16	40	
GFT45/30	TK	PNP	33	3		100 μ A	6	0.5	16	40	
GFT2006/30	TK	PNP	16	16		3mA	6	500		25	
GFT2006/60	TK	PNP	16	16		3mA	6	500		25	
GFT2006/90	TK	PNP	16	16		3mA	6	500		250	
GFT3008/9	TK	PNP					2	500	25†	33†	50†
GFT3008/30	TK	PNP	16	16	6mA	10mA	2	50	20†		55†
GFT3008/40	TK	PNP	16	16	6mA	10mA	2	50	20†		55†
GFT3008/60	TK	PNP	16	16	6mA	10mA	2	50	20†		55†
GFT3008/20	TK	PNP	16	16	6mA	10mA	2	50	20†		55†
GFT3008/80	TK	PNP	16	16	6mA	10mA	2	50	20†		55†
GFT3108	TK	PNP		16		10mA					
GFT3408/20	TK	PNP	16	16	6mA	10mA	2	50	32†		88†
GFT3408/40	TK	PNP	16	16	6mA	10mA	2	50	32†		88†
GFT3408/60	TK	PNP	16	16	6mA	10mA	2	50	32†		88†
GFT3408/80	TK	PNP	16	16	6mA	10mA	2	50	32†		88†
GFT3708	TK	PNP		16		10mA			60†		100†
GFT4012	TK	PNP	16	16	6mA	10mA	2	250		50†	
GFT4012/30	TK	PNP	16	16	6mA	10mA	2	250		50†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
1	0.2	4		20	80		GFT21/30
1	0.2	4		20	80		GFT21/60
1	0.2	5*			80		GFT21R
1	0.2	10*			80		GFT22
1	0.2	10*			80		GFT22/30
1	0.2	10*			80		GFT22/60
1	0.2	5*			80		GFT22R
1	0.2	4		20	80		GFT25
1	0.2		7.5	20	80		GFT25/15
1	0.2	4	15	20	80		GFT25/30
1	0.2	4		20	80		GFT25/60
		5*			80		GFT25R
				40	150		GFT31
					125		GFT31/30
					125		GFT31/60
				300	150		GFT32
			15	300	150		GFT32/30
				300	150		GFT32/60
1	0.2	4		300	150		GFT34
1	0.2	4	7.5	300	150		GFT34/15
1	0.2	4	15	300	150		GFT34/30
1	0.2	4		300	150		GFT34/60
6	1	5		10	30		GFT41
6	1	5		10	30		GFT42A
6	1	5		10	30		GFT42B
				40	30		GFT43
6	1	5		10	30		GFT43A
6	1	5		10	30		GFT43B
			15	20	25		GFT44
6	1	5	15	10	30		GFT44/15E
		38*			63		GFT44/30
			15	20	25		GFT45
				20	25		GFT45/30
			10	2A	6.0W†		GFT2006/30
			20	2A	6.0W†		GFT2006/60
			30	2A	6.0W†		GFT2006/90
			20	3A	8.0W†		GFT3008/9
			30	3A	8.0W†		GFT3008/20
			40	3A	8.0W†		GFT3008/30
							GFT3008/40
			60	3A	8.0W†		GFT3008/60
			80	3A	8.0W†		GFT3008/80
							GFT3108
			20	3A	8.0W†		GFT3408/20
			40	3A	8.0W†		GFT3408/40
			60	3A	8.0W†		GFT3408/60
			80	3A	8.0W†		GFT3408/80
				3A	8.0W†		GFT3708
							GFT4012
			10	4A	12.0W†		GFT4012/30

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
GFT4012/60	TK	PNP	16	16	6mA	10mA	2	250		50†	
GFT4112	TK	PNP		16		15mA					
GFT4308/40	TK	PNP	16				2	500	60†	75†	
GFT4308/60	TK	NPN	16	30	3mA	10mA	2	500	30†	45†	60†
GFT4412/30	TK	PNP		16		15mA	2	1A	40†		80†
GFT4608/40	TK	PNP	16	20	1.5mA	5mA	2	500	60†	75†	
GFT14712	TK	PNP		16		15mA					
GFT8024	TK	PNP					2	8A	20†		
GJTX4/A	AEI			12	8 μ A		12	100			
GJTX4/B	AEI			30	8 μ A		12	100			
GJTX4/C	AEI			60	8 μ A		12	100			
GM290	TIL	PNP	9				12	3	20†		
GM290A	TIL	PNP	132				12	3	20†		
GM378	TIL	PNP	9				12	3	20†		
GM378A	TIL	PNP	132				12	3	20†		
GM656A	TIL	PNP	132				12	3	20†		
GT1	AEI	PNP	1				4.5	1		20	
GT2	AEI	PNP	1				4.5	1		40	
GT3	AEI	PNP	1				4.5	1		60	
GT11	AEI	PNP	1				4.5	1		30	
GT12	AEI	PNP	1				4.5	1		60	
GT13	AEI	PNP	1				4.5	1		100	
GT2C	GT	PNP	13				5	1	30	42	50
GT31	AEI	PNP	1	4.5	70 μ A	350 μ A	4.5	1	15	20	25
GT32	AEI	PNP	1	4.5	120 μ A	350 μ A	4.5	1	25	40	45
GT33	AEI	PNP	1	4.5	180 μ A	350 μ A	4.5	1	45	60	100
GT34	GT	PNP	13				5	1	10	20	30
GT34HV	GT	PNP	13				5	1	10	25	
GT34N	GIC	PNP	17				5	1	10	18	34
GT34S	GIC	PNP	13				5	1	10	20	30
GT35	GIC	NPN	13				5	1	20	50	80
GT40	AEI	PNP	1				4.5	1	15	30	60
GT41	AEI	PNP	1	4.5	30 μ A	350 μ A	4.5	1	15	30	60
GT42	AEI	PNP	1	4.5	60 μ A	350 μ A	4.5	1	30	60	100
GT43	AEI	PNP	1	4.5	100 μ A	350 μ A	4.5	1	50	100	150
GT44	GIC AEI	PNP	1				4.5	1	15	30	60
GT45	AEI	PNP	1				4.5	1	15	30	60
GT46	AEI	PNP	1				4.5	1	30	60	100
GT47	AEI	PNP	1				4.5	1	50	100	150
GT74	GIC	PNP	13				5	1	50	75	99
GT75	GIC	PNP	13				5	1	100		200
GT81	GIC	PNP	13				5	1	50		100
GT81HS	GIC	PNP	13				5	1	50		100
GT82	GIC	PNP	13				5	1	100	200	
GT109	GIC	PNP	13				5	1	80	110	140
GT122	GIC	PNP	13				6	1	50	90	
GT123	GIC	PNP	13				5	1	30		
GT167	GIC	NPN	13				5	1		65	
GT222	GIC	PNP	13				5	1	10		
GT229	GIC	NPN	13				5	1	10		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			20	4A	12.0W†		GFT4012/60 GFT4112
			20		8.0W†		GFT4308/40
			30		8.0W†		GFT4308/60 GFT4412
			20	4A	8.0W†		GFT4608/40 GFT4712
				8A			GFT8024 GJTX4/A GJTX4/B
			12				
			30				
			60				GJTX4/C
			15	50	75		GM290
			15	50	75		GM290A
			15	50	75		GM378
			15	50	75		GM378A
			15	50	75		GM656A
			9		125		GT1
			9		125		GT2
			9		125		GT3
			9	100	100		GT11
			9	100	100		GT12
			9	100	100		GT13
5	1	16			150		GT20
2	0.5	5	15	100	125		GT31
2	0.5	5	15	100	125		GT32
2	0.5	5	15	100	125		GT33
5	1	16			150		GT34
5	1	16			150		GT34HV
					150		GT34N
5	1	16			150		GT34S
5	1	16	10		150		GT35
			15	100	100		GT40
2	0.5	5	9	100	100		GT41
2	0.5	5	9	100	100		GT42
2	0.5	5	9	100	100		GT43
2	0.5	5	25	100	100		GT44
2	0.5	5	25	100	100		GT45
2	0.5	5	25	100	100		GT46
2	0.5	5	25	100	100		GT47
2	0.5	5	9	100	100		GT74
5	1	12			150		GT75
6	1	24	25		125		GT81
5	1	16			225		GT81HS
5	1	16			150		GT82
5	1	16			125		GT109
5	1	16			150		GT122
5	1	16	15		150		GT123
			20		150		GT167
					125		GT222
					125		GT229

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
GT364	GIC	NPN	17				4.5	1		20	
GT365	GIC	NPN	17				4.5	1		40	
GT366	GIC	NPN	17				5.6	1		100	
GT422	ST	NPN	16								
GT423	ST	NPN	16								
GT424	ST	NPN	16								
GT425	ST	NPN	16								
GT426	ST	NPN	16								
GT605	GIC	PNP	13				6	1		40	
GT606	GIC	PNP	13				6	1		60	
GT607	GIC	PNP	13				6	1		80	
GT608	GIC	PNP	13				6	1		120	
GT758	GIC	PNP	13				5	1	10	15	
GT759R	GIC	PNP	13				5	1		15	
GT760R	GIC	PNP	13				5	1		20	
GT761R	GIC	PNP	13				5	1		30	
GT762R	GIC	PNP	13				5	1		60	
GT792	GIC	NPN	13				5	1	37	100	160
GT792R	GIC	NPN	13				4.5	1		60	
GT903	GIC	NPN	13				0.2		35†		70†
GT904	GIC	NPN	13				0.2		30†		
GT905	GIC	NPN	13				0.2		20†		40†
GT947	GIC	NPN	13				0.2		40†		
GT948	GIC	NPN	17				0.25	200	20†		
GT948R	GIC	NPN	13				4.5	1		40	
GT949	GIC	NPN	13				1		30†		
GT1200	GIC	NPN	13				5	1		35	
GT1201	GIC	NPN					0.25	1	30†		
GT1202	GIC	NPN					0.25	1	30†		
GT1604	GIC	PNP	13				5	1		15	
GT1605	GIC	PNP	13				9	1	30		
GT1606	GIC	PNP	13				9	6	50		
GT1607	GIC	PNP	13				5	1	60		
GT1608	GIC	NPN	13								
GT1609	GIC	NPN	13								
GT1624	GIC	NPN	17				5	1	15	70	125
GT1644	GIC	PNP	17				6	1		15	
GT1658	GIC	NPN	13				0.25	20		40†	
GT1665	GIC	PNP	13				0.5	10	15†		
GT2887	GIC		13				6	1		250	
GT5149			14								
GT5151	GI	PNP	17				0.25	100	60†		
GT5153	GI	PNP	17				0.25	100	100†		
GTA1	ROS	PNP					6	0.5		40	
GTA2	ROS	PNP					6	0.5		100	
GTA3	ROS	PNP								65	
GTE1	ROS	PNP					3	3		47	
GTE2	ROS	PNP					6	10		22	
GTG5116	GIC	PNP	17				1	40	20†		
GTG5117	GIC	PNP					1	40	20†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
					150		GT364
					150		GT365
					150		GT366
			60	6A	40.0W†		GT422
			60	6A	40.0W†		GT423
			60	3A	40.0W†		GT424
			36	6A	40.0W†		GT425
			36	3A	40.0W†		GT426
				15	120		GT605
			15		120		GT606
			15		120		GT607
5	1	16	15		120		GT608
			20		100		GT758
			10		90		GT759R
			10		90		GT760R
			8		90		GT761R
			6		90		GT762R
					150		GT792
			10		90		GT792R
					150		GT903
5	1	12			150		GT904
					150		GT905
					150		GT947
			15		150		GT948
			10		90		GT948R
			20		150		GT949
5	1	10			120		GT1200
6	1	20			120		GT1201
6	1	20			120		GT1202
		24*			90		GT1604
		29			90		GT1605
		29*			90		GT1606
					100		GT1607
					125		GT1608
					125		GT1609
					120		GT1624
					225		GT1644
					150		GT1658
							GT1665
					150		GT2887
					50		GT5149
			10		300		GT5151
			6		300		GT5153
		36*			63		GTA1
		38*			63		GTA2
				2	200		GTA3
		15*		10	125		GTE1
		15*		30	125		GTE2
			12	200	120		GTG5116
			12	200	120		GTG5117

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
GTL1	ROS	PNP									
GTL3	ROS	PNP					2	500	25†	33†	50†
GTN5148	GI	PNP	13				0.5	10	30†		
GTN5149	GI	PNP	13					25†			
GTSMPA	GI	PNP	13			0.5	50		15		45
							1				
GTSMPB	GI	PNP	13				1		20		60
GTSMPC	GI	NPN/PNP	13				1	1	25		75
GTSMPD	GI	NPN/PNP	13				1	1	30		90
GTSMFE	GI	NPN/PNP	13				1	1	35		105
GTV	ROS	PNP					3	0.5		30	
H3A	MH	PNP	16				2	5	10†		25†
H4A	MH	PNP	16				2	7.5	23†		60†
H5	MH	PNP	27				2	500		115†	
H5B2N3	MH	PNP	27				2	2A	20†		50†
H6	MH	PNP	27				2	500		115†	
H7	MH	PNP	27				2	500		115†	
H10	MH	PNP	56				2	50		25†	
H12	MH	PNP	56				2	500		70†	
H12A	MH	PNP	56				2	500		70†	
H15A	SEM	PNP	16				1.5	15A	20†	40†	
H15B	SEM	PNP	16				1.5	15A	50†	100†	
H45	MH	PNP					2	2A	14†		34†
H71A	MH	PNP	85				2	200	30†	50†	90†
H71E	MH	PNP	85				2	200	30†	50†	90†
HA5024	HA	NPN	55								
HA7501	HA	PNP	55				4.5	1	4		
HA7502	HA	PNP	55				4.5	1	13		
HA7503	HA	PNP	55				4.5	1	13		
HA7505	HA	PNP	55				4.5	1	4		
HA7506	HA	PNP	55				4.5	1	10		
HA7507	HA	PNP	55				4.5	1	9		
HA7508	HA	PNP	55				4.5	1	13		
HA7509	HA	PNP	55				4.5	1	6		
HA7510	HA	PNP	55				4.5	1	19		
HA7517	HA	PNP	55		100 μ A		5	1	28		65
HA7520	HA	PNP	55				5	1	5		18
HA7521	HA	PNP	55				5	1	5		18
HA7522	HA	PNP	55				5	1	14	20	32
HA7523	HA	PNP	55				5	1	14	20	32
HA7524	HA	PNP	55				5	1	14	20	32
HA7525	HA	PNP	55				5	1	14		32
HA7526	HA	PNP	55				5	1	28	42	65
HA7527	HA	PNP	55				5	1	28	42	65
HA7528	HA	PNP	55				5	1	28	42	65
HA7529	HA	PNP	55				5	1	14		32
HA7530	HA	PNP	13				5	1	5	10	18
HA7531	HA	PNP	13				5	1	5	10	18
HA7532	HA	PNP	13				5	1	14	20	32
HA7533	HA	PNP	13				5	1	14	20	32
HA7534	HA	PNP	13				5	1	14	20	32

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
					150		GT792
			30				GTL1
				3A			GTL3
			3	50	50		GTN5148
			10	50	60		GTN5149
			15		100		GTSMPA
			15		100		GTSMPB
5	1	14	15	100	100		GTSMPC
5	1	14	15	100	100		GTSMPD
5	1	14	15	100	100		GTSMPE
		55*		10	125		GTV
				350	3.0W†		H3A
				500	3.0W†		H4A
			60	3.5A	20.0W†		H5
			60	3.5A			H5B2N3
			55	3.5A	10.0W†		H6
			55	3.5A	20.0W†		H7
				15A	25.0W†		H10
			7	40A	187.0W†		H12
			20	40A	187.0W†		H12A
			60	20A	16.0W†		H15A
			10	30A	16.0W†		H15B
				3.5A			H45
			50	1A			H71A
			15	200	1.5W		H71E
							HA5024
			50		500		HA7501
			50		500		HA7502
			110		500		HA7503
			20		500		HA7505
			35		500		HA7506
			20		500		HA7507
			50		500		HA7508
			30		500		HA7509
			35		500		HA7510
					1.0W		HA7517
			35		1.0W		HA7520
			60		1.0W		HA7521
			15		1.0W		HA7522
			35		1.0W		HA7523
			60		2.0W		HA7524
			110		1.0W		HA7525
			15		1.0W		HA7526
			35		1.0W		HA7527
			60		1.0W		HA7528
			90		1.0W		HA7529
			35		400		HA7530
			60		400		HA7531
			15		400		HA7532
			35		400		HA7533
			60		400		HA7534

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
HA7535	HA	PNP	13				5	1	14		32
HA7536	HA	PNP	13				5	1	28	42	65
HA7537	HA	PNP	13				5	1	28	42	65
HA7538	HA	PNP	13				5	1	28	42	65
HA7539	HA	PNP	13				5	1	14		32
HA7540	HA	PNP	13				5	1	14		
HA7541	HA	PNP	55		600 μ A		5	1	14		
HA7597	HA	PNP	55				5	3		14	
HA7598	HA	PNP	55				5	3		28	
HA7599	HA	PNP	55				5	3		60	
HA7630	HA	PNP	13				10	5	9		36
HA7631	HA	PNP	13				10	5	9		36
HA7632	HA	PNP	13				10	5	30		90
HA7633	HA	PNP	13				10	5	30		90
HA7730	HA	PNP	55				10	5	9		36
HA7731	HA	PNP	55				10	5	9		36
HA7732	HA	PNP	55				10	5	30		90
HA7733	HA	PNP	55				10	5	30		90
HA9048	HA	PNP	13				1	10	10†		30†
HA9049	HA	PNP	13				1	10	25†		80†
HA9500	HA	PNP	17				20	150			45†
HA9501	HA	PNP	17				20	150			90†
HA9502	HA	PNP	17				20	150			100†
HA9529	HA	PNP	55				5	1			
HF100	ROS	PNP									
HF200	ROS	PNP					10.5	3		8.5	
HJ36	HIT	PNP	16								
HJ60	HIT	PNP	13								
HJ70	HIT	PNP	31								
HJ71	HIT	PNP	31								
HJ72	HIT	PNP	31								
HJ73	HIT	PNP	31								
HJ74	HIT	PNP	31								
HJ75	HIT	PNP	31								
HM696	HOF	NPN	13				10	150	20†	40†	60†
HM697	HOF	NPN	13				10	150	40†	70†	120†
HM698	HOF	NPN	17				10	150	20†		60†
HM699	HOF	NPN	17				10	150	40†		120†
HS507(H)		PNP					6		1	150†	
HS509	HIT								20†	40†	110†
HT100	HA	PNP	17				1	10	14†		45†
HT101	HA	PNP	17				1	10	35†		120†
HT400	HA	NPN	17				1	10	20†		60†
HT401	HA	NPN	17				1	10	35†		160†
HT402	HA	NPN	17				1	10	20†		60†
HT403	HA	NPN	17				1	10	35†		160†
IY8015	SGS	NPN	130				5	1		125†	
IY8016	SGS	NPN	130				5	1		125†	
J460	TII	NPN	5				2	6	3†		
J461	TII	NPN	5				2	6	7†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			110		400		HA7535
			15		400		HA7536
			35		400		HA7537
			60		400		HA7538
			90		400		HA7539
							HA7540
							HA7541
5	1	10	250		1.0W		HA7597
5	1	10	250		1.0W		HA7598
5	1	10	250		1.0W		HA7599
							HA7630
			100		400		HA7631
			100		400		HA7632
			100		400		HA7633
			100		1.0W		HA7730
			100		1.0W		HA7731
			100		1.0W		HA7732
			100		1.0W		HA7733
			100		275		HA9048
			100		275		HA9049
					750		HA9500
					750		HA9501
					750		HA9502
							HA9529
							HP100
		15*	30	10	30		HP200
		10*	30	10	30		HJ36
			25	1A	4.0W†		HJ60
			12	15	80		HJ70
			20	10	80		HJ71
			20	10	80		HJ72
			25	10	80		HJ73
			25	10	80		HJ74
			25	10	80		HJ75
					400		HM696
					400		HM697
			80		400		HM698
			80		400		HM699
			21	15	60		HS507(H)
				15	60		HS509
			20		300		HT100
			20		300		HT101
			20	500	400		HT400
			20	500	400		HT401
			20		600		HT402
			20		600		HT403
5	10μA	6*	15		60		IY8015
5	10μA	6*	15		60		IY8016
			20	25	150		J460
			20	25	150		J461

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
J462	TII	NPN	5				2	6	14†		
J463	TII	NPN	5				2	6	20†		
J464	TII	NPN	5				2	6	30†		
J465	TII	NPN	5				2	6	40†		
J466	TII	NPN	5				2	6	50†		
J503	TII	NPN	13				5	1	9		27
J504	TII	NPN	13				5	1	9		27
J505	TII	NPN	13				5	1	9		27
J506	TII	NPN	13				5	1	25		75
J507	TII	NPN	13				5	1	25		75
J508	TII	NPN	13				5	1	25		75
J509	TII	NPN	13				5	1	70		210
J510	TII	NPN	13				5	1	70		210
J511	TII	NPN	13				5	1	70		210
J581	TII	NPN	5				10	5	10	20	30
J582	TII	NPN	5				10	5	10		30
J583	TII	NPN	5				10	5	10		30
J584	TII	NPN	5				10	5	20		60
J585	TII	NPN	5				10	5	20		60
J586	TII	NPN	5				10	5	20		60
J587	TII	NPN	5				10	5	40		150
J588	TII	NPN	5				10	5	40		150
J589	TII	NPN	5				10	5	40		150
J594	TII	NPN	5				10	5	10		
J595	TII	NPN	5				10	5	10		
J596	TII	NPN	5				10	5	10		
J623	TII	NPN	17				5	1	9		27
J624	TII	NPN	17				5	1	9		27
J625	TII	NPN	17				5	1	9		27
J626	TII	NPN	17				5	1	25		75
J627	TII	NPN	17				5	1	25		75
J628	TII	NPN	17				5	1	25		75
J629	TII	NPN	17				5	1	70		210
J630	TII	NPN	17				5	1	70		210
J631	TII	NPN	17				5	1	70		210
L15A	SEM	PNP	16				1.5	15A	20†	40†	
L15B	SEM	PNP	16				1.5	15A	50†	100†	
L5022A	PCO	PNP	10				0.6	100	35†	60†	105†
L5025A	PCO	PNP	10				0.6	100	60†	90†	120†
L5431	PCO	NPN					15	2	6†		
L9000	PCO	NPN	17	10		50nA	1	10	25†		
LT11	CBS	PNP	21				24	180		40	
LT12	CBS	PNP	21				24	180		40	
LT13	CBS	PNP	21				24	180		40	
LT14	CBS	PNP	21				24	180		40	
LT15	CBS	PNP	21				24	180		40	
LT55	CBS	PNP	27				2	500	20†		
LT5021	CBS	PNP	27				2	500	20†		
LT5022	CBS	PNP	27				2	500	20†		
LT5023	CBS	PNP	27				2	500	40†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			20	25	150		J462
			20	25	150		J463
			20	25	150		J464
			20	25	150		J465
			20	25	150		J466
				25	150		J503
				25	150		J504
				25	150		J505
				25	150		J506
				25	150		J507
				25	150		J508
				25	150		J509
				25	150		J510
				25	150		J511
				50	675		J581
				50	675		J582
				50	675		J583
				50	675		J584
				50	675		J585
				50	675		J586
				50	675		J587
				50	675		J588
				50	675		J589
				50	675		J594
				50	675		J595
				50	675		J596
			15	25	150		J623
			30	25	150		J624
			60	25	150		J625
			15	25	150		J626
			30	25	150		J627
			60	250	150		J628
			15	250	150		J629
			30	250	150		J630
			60	250	150		J631
			30	20A	16.0W†		L15A
			30	30A	16.0W†		L15B
			30	150	250		L5022A
			25	150	250		L5025A
							L5431
			15		350		L9G00
			60	3A	20.0W†		LT11
			60	3A	20.0W†		LT12
			60	3A	20.0W†		LT13
			60	3A	20.0W†		LT14
			60	3A	20.0W†		LT15
			60	3A	20.0W†		LT55
			30	3A	20.0W†		LT5021
			30	3A	20.0W†		LT5022
			30	3A	20.0W†		LT5023

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{CO}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
LT5024	CBS	PNP	27				2	500	40†		
LT5025	CBS	PNP	16				2	500	40†		
LT5026	CBS	PNP	27				2	500	60†		
LT5027	CBS	PNP	27				1	500	60†		
LT5028	CBS	PNP	16				2	500	60		
LT5029	CBS	PNP	27				2	500	40†		
LT5030	CBS	PNP	27				2	500	40†		
LT5031	CBS	PNP	16				2	500	40†		
LT5032	CBS	PNP	27				2	500	60†		
LT5033	CBS	PNP	27				2	500	60†		
LT5034	CBS	PNP	16				2	500	60†		
LT5035	CBS	PNP	27				2	500	20†		
LT5036	CBS	PNP	27				2	500	20†		
LT5037	CBS	PNP	27				2	500	40†		
LT5038	CBS	PNP	27				2	500	40†		
LT5039	CBS	PNP	16				2	500	40†		
LT5040	CBS	PNP	27				2	500	60†		
LT5041	CBS	PNP	27				2	500	60†		
LT5042	CBS	PNP	16				2	500	60†		
LT5043	CBS	PNP	27				2	500	20†		
LT5044	CBS	PNP	27				2	500	20†		
LT5045	CBS	PNP	16				2	500	20†		
LT5046	CBS	PNP	27				2	500	40†		
LT5047	CBS	PNP	27				2	500	40†		
LT5048	CBS	PNP	16				2	500	40†		
LT5049	CBS	PNP	27				2	500	60†		
LT5050	CBS	PNP	27				2	500	50†		
LT5051	CBS	PNP	16				2	500	60†		
LT5052	CBS	PNP	27				2	750	30†		
LT5053	CBS	PNP	27				2	750	30†		
LT5054	CBS	PNP	16				2	750	30†		
LT5055	CBS	PNP	27				2	750	60†		
LT5056	CBS	PNP	27				2	750	60†		
LT5057	CBS	PNP	16				2	750	60†		
LT5058	CBS	PNP	27				2	750	100†		
LT5059	CBS	PNP	27				2	750	100†		
LT5060	CBS	PNP	16				2	750	100†		
LT5061	CBS	PNP	27				2	750	30†		
LT5062	CBS	PNP	27				2	750	30†		
LT5063	CBS	PNP	16				2	750	60†		
LT5064	CBS	PNP	27				2	750	60†		
LT5065	CBS	PNP	27				2	750	60†		
LT5066	CBS	PNP	16				2	750	60†		
LT5067	CBS	PNP	27				2	750	100†		
LT5068	CBS	PNP	27				2	750	100†		
LT5069	CBS	PNP	16				2	750	100†		
LT5070	CBS	PNP	27				2	750	30†		
LT5071	CBS	PNP	27				2	750	30†		
LT5072	CBS	PNP	16				2	750	30†		
LT5073	CBS	PNP	27				2	750	60†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			30	3A	20.0W†		LT5024
			30	3A	20.0W†		LT5025
			30	3A	20.0W†		LT5026
			30	3A	20.0W†		LT5027
			30	3A	20.0W†		LT5028
			60	3A	20.0W†		LT5029
			60	3A	20.0W†		LT5030
			60	3A	20.0W†		LT5031
			60	3A	20.0W†		LT5032
			60	3A	20.0W†		LT5033
			60	3A	20.0W†		LT5034
			90	3A	20.0W†		LT5035
			90	3A	20.0W†		LT5036
			90	3A	20.0W†		LT5037
			90	3A	20.0W†		LT5038
			90	3A	20.0W†		LT5039
			90	3A	20.0W†		LT5040
			90	3A	20.0W†		LT5041
			90	3A	20.0W†		LT5042
			100	3A	20.0W†		LT5043
			100	3A	20.0W†		LT5044
			100	3A	20.0W†		LT5045
			100	3A	20.0W†		LT5046
			100	3A	20.0W†		LT5047
			100	3A	20.0W†		LT5048
			100	3A	20.0W†		LT5049
			100	3A	20.0W†		LT5050
			100	3A	20.0W†		LT5051
			30	4.5A	30.0W†		LT5052
			30	4.5A	30.0W†		LT5053
			30	4.5A	20.0W†		LT5054
			30	4.5A	30.0W†		LT5055
			30	4.5A	30.0W†		LT5056
			30	4.5A	30.0W†		LT5057
			30	4.5A	30.0W†		LT5058
			30	4.5A	30.0W†		LT5059
			30	4.5A	30.0W†		LT5060
			60	4.5A	30.0W†		LT5061
			60	4.5A	30.0W†		LT5062
			60	4.5A	30.0W†		LT5063
			60	4.5A	30.0W†		LT5064
			60	4.5A	30.0W†		LT5065
			60	4.5A	30.0W†		LT5066
			60	4.5A	30.0W†		LT5067
			60	4.5A	30.0W†		LT5068
			60	4.5A	30.0W†		LT5069
			75	4.5A	30.0W†		LT5070
			75	4.5A	30.0W†		LT5071
			75	4.5A	30.0W†		LT5072
			75	4.5A	30.0W†		LT5073

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
LT5074	CBS	PNP	27				2	750	60†		
LT5075	CBS	PNP	16				2	750	60†		
LT5076	CBS	PNP	27				2	750	100†		
LT5077	CBS	PNP	27				2	750	100†		
LT5078	CBS	PNP	16				2	750	100†		
LT5079	CBS	PNP	27				2	750	30†		
LT5080	CBS	PNP	27				2	750	30†		
LT5081	CBS	PNP	16				2	750	30†		
LT5082	CBS	PNP	27				2	750	60†		
LT5083	CBS	PNP	27				2	750	60†		
LT5084	CBS	PNP	16				2	750	60†		
LT5085	CBS	PNP	27				2	750	100†		
LT5086	CBS	PNP	27				2	750	100†		
LT5087	CBS	PNP	16				2	750	100†		
LT5088	CBS	PNP	27				3	1A	40†		
LT5089	CBS	PNP	27				3	1A	40†		
LT5090	CBS	PNP	16				3	1A	40†		
LT5091	CBS	PNP	27				3	1A	80†		
LT5092	CBS	PNP	27				3	1A	80†		
LT5093	CBS	PNP	16				3	1A	80†		
LT5094	CBS	PNP	27				3	1A	160†		
LT5095	CBS	PNP	27				3	1A	160†		
LT5096	CBS	PNP	16				3	1A	160†		
LT5097	CBS	PNP	27				3	1A	40†		
LT5098	CBS	PNP	27				3	1A	40†		
LT5099	CBS	PNP	16				3	1A	40†		
LT5100	CBS	PNP	27				3	1A	80†		
LT5101	CBS	PNP	27				3	1A	80†		
LT5102	CBS	PNP	16				3	1A	80†		
LT5103	CBS	PNP	27				3	1A	80†		
LT5104	CBS	PNP	27				3	1A	160†		
LT5105	CBS	PNP	16				3	1A	160†		
LT5106	CBS	PNP	27				3	1A	40†		
LT5107	CBS	PNP	27				3	1A	40†		
LT5108	CBS	PNP	16				3	1A	40†		
LT5109	CBS	PNP	27				3	1A	80†		
LT5110	CBS	PNP	27				3	1A	80†		
LT5111	CBS	PNP	16				3	1A	80†		
LT5112	CBS	PNP	27				3	1A	160†		
LT5113	CBS	PNP	27				3	1A	160†		
LT5114	CBS	PNP	16				3	1A	160†		
LT5115	CBS	PNP	27				3	1A	40†		
LT5116	CBS	PNP	27				3	1A	40†		
LT5117	CBS	PNP	16				3	1A	40†		
LT5118	CBS	PNP	27				3	1A	80†		
LT5119	CBS	PNP	27				3	1A	80†		
LT5120	CBS	PNP	16				3	1A	160†		
LT5121	CBS	PNP	27				3	1A	160†		
LT5122	CBS	PNP	27				3	1A	160†		
LT5123	CBS	PNP	16				3	1A	160†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			75	4.5A	30.0W†		LT5074
			75	4.5A	30.0W†		LT5075
			75	4.5A	30.0W†		LT5076
			75	4.5A	30.0W†		LT5077
			75	4.5A	30.0W†		LT5078
			90	4.5A	30.0W†		LT5079
			90	4.6A	30.0W†		LT5080
			90	4.5A	30.0W†		LT5081
			90	4.5A	30.0W†		LT5082
			90	4.5A	30.0W†		LT5083
			90	4.5A	30.0W†		LT5084
			90	4.5A	30.0W†		LT5085
			90	4.5A	30.0W†		LT5086
			90	4.5A	30.0W†		LT5087
			30	6A	40.0W†		LT5088
			30	6A	40.0W†		LT5089
			30	6A	40.0W†		LT5090
			30	6A	40.0W†		LT5091
			30	6A	40.0W†		LT5092
			30	6A	40.0W†		LT5093
			30	6A	40.0W†		LT5094
			30	6A	40.0W†		LT5095
			30	6A	40.0W†		LT5096
			60	6A	40.0W†		LT5097
			60	6A	40.0W†		LT5098
			60	6A	40.0W†		LT5099
			60	6A	40.0W†		LT5100
			60	6A	40.0W†		LT5101
			60	6A	40.0W†		LT5102
			60	6A	40.0W†		LT5103
			60	6A	40.0W†		LT5104
			60	6A	40.0W†		LT5105
			75	6A	40.0W†		LT5106
			75	6A	40.0W†		LT5107
			75	6A	40.0W†		LT5108
			75	6A	40.0W†		LT5109
			75	6A	40.0W†		LT5110
			75	6A	40.0W†		LT5111
			75	6A	40.0W†		LT5112
			75	6A	40.0W†		LT5113
			75	6A	40.0W†		LT5114
			90	6A	40.0W†		LT5115
			90	6A	40.0W†		LT5116
			90	6A	40.0W†		LT5117
			90	6A	40.0W†		LT5118
			90	6A	40.0W†		LT5119
			90	6A	40.0W†		LT5120
			90	6A	40.0W†		LT5121
			90	6A	40.0W†		LT5122
			90	6A	40.0W†		LT5123

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	Vce	TYP μ A	MAX μ A	Vce	I _c mA	MIN	TYP	MAX
LT5152	CBS	PNP	27				2	500	20†		
LT5153	CBS	PNP	27				2	500	20†		
LT5161	CBS	PNP					2	1A	40†		
LT5163	CBS	NPN	16				2	500	30†		
LT5164	CBS	NPN	16				2	500	30†		
LT5164A	CBS	NPN	16				2	500	30†		
LT5165	CBS	NPN	16				2	500	30†		
LT5169	CBS	PNP	16								
LT5173	CBS	PNP	16				2	500	50†		
LT5174	CBS	PNP	16				2	500	150†		
LT5191	CBS	PNP	16				2	500	30†		
LT5192	CBS	PNP	16				1	500	30†		
LT5193	CBS	PNP	16				2	500	30†		
LT5193A	CBS	PNP	16				2	500	30†		
LT5201	CBS	PNP	27				6	250	10†	40†	
LT5202	CBS	NPN	27				6	250	10†	40†	
LT5209	CBS	PNP	27				1	500	10†	40†	
LT5210	CBS	NPN	27				1	500	10†	40†	
M1	SH	PNP	13								
M2	SH	PNP	13								
M104B	FC	NPN	13				5	10	45†		
MA1	SPR	PNP	15				3	1	40	245	450
MA2	SPR	PNP	15				3	1	40	245	450
MA28	SPR	PNP	15				3	1	20		
MA393	SC	PNP	13				3	0.5		155	
MA393A	SC	PNP	13				3	500	40		155
MA393B	SC	PNP	13				3	500	40		155
MA881	MR	PNP	17				6	1	30		70
MA882	MR	PNP	17				6	1	50		120
MA883	MR	PNP	17				6	1	100		225
MA884	MR	PNP	17				6	1	190		400
MA885	MR	PNP	17				6	1	15		40
MA886	MR	PNP	17				6	1	30		70
MA887	MR	PNP	17				6	1	50		120
MA888	MR	PNP	17				6	1	100		225
MA889	MR	PNP	17				6	1	190		400
MA909	MR	PNP	17				0.35	5	20†		
MA910	MR	PNP	17				0.35	5	20†		
MA1702	MR	PNP	17				6	1	500		
MA1703	MR	PNP	17				6	1	200		500
MA1704	MR	PNP	17				6	1	350		800
MA1705	MR	PNP	17				6	1	500		800
MA1706	MR	PNP	17				6	1	200		500
MA1707	MR	PNP	17				6	1	350		800
MA1708	MR	PNP	17				6	1	500		
MA4990	MIC	NPN	35				28	350	15†		80†
MAS20	SC	PNP	13				3	500 μ A	80	130	200
MAS21	SC	PNP	13				3	500 μ A	80	130	200
MAS22	SC	PNP	13				3	500 μ A	80	130	200
MAT706	HA	NPN					1	10	20†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			30	3A	20.0W†		LT5152
			60	3A	20.0W†		LT5153
				6A			LT5161
			45	3A	20.0W†		LT5163
			60	3A	20.0W†		LT5164
			80	3A	20.0W†		LT5164A
			30	3A	20.0W†		LT5165
			25	4A	20.0W†		LT5169
			25	4A	20.0W†		LT5173
			25	4A	20.0W†		LT5174
			30	3A	20.0W†		LT5191
			45	3A	20.0W†		LT5192
			60	3A	20.0W†		LT5193
			80	3A	20.0W†		LT5193A
			60	1A	17.0W†		LT5201
			60	1A	17.0W†		LT5202
			30	1A	17.0W†		LT5209
			30	1A	17.0W†		LT5210
				12	100		M1
				12	100		M2
			6	50	25		M104B
			3	50	20		MA1
			6	50	25		MA2
			6	50	25		MA28
							MA393
			10	50	25		MA393A
			14	50	25		MA393B
				500	200		MA881
				500	200		MA882
				500	200		MA883
				500	200		MA884
				500	200		MA885
				500	200		MA886
				500	200		MA887
				500	200		MA888
				500	200		MA889
							MA909
				500	200		MA910
4.5	0.5	5		500	200		MA1702
				500	200		MA1703
				500	200		MA1704
				500	200		MA1705
				500	200		MA1706
				500	200		MA1707
				500	200		MA1708
			60	1.2A			MA4990
			6	40	25		MAS20
			6	40	25		MAS21
			6	40	25		MAS22
							MA1706

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
MC104	SH	NPN	13				1	10		10	
MC105	SH	NPN	13				1	10		10	
MC106	SH	NPN	13				1	10		10	
MC107	SH	NPN	13				1	10		10	
MCS2135	MR	NPN	134				5	1	80		450
MCS2136	MR	NPN	134				5	1	150		900
MCS2137	MR	PNP	134				5	1	100		450
MCS2138	MR	PNP	134				5	1	300		900
MD499	SC	PNP	13				10	2		8.5	
MD501	SC	PNP	13				500mV	10	20†	70†	
MD502	SC	PNP	13				10	2		65	
MD503	SC	PNP	13				10	2		45	
MD504	SC	PNP	13				12	1	16		
MD981	MR	NPN	102				10	10	35†		
MD981F	MR	NPN	136				10	10	35†		
MD982	MR	PNP	102				10	10	35†		
MD982F	MR	PNP	136				10	10	35†		
MD984	MR	PNP	102				10	10	25†		
MD985	MR	NPN/PNP	137				10	10	35†		
MD985F	MR	NPN/PNP	138				10	10	35†		
MD986	MR	NPN/PNP	137				10	10	25†		
MD986F	MR	NPN/PNP	138				10	10	25†		
MD990	MR	PNP	102				10	1	40†		160†
MD1120	MR	NPN	102				10	1	40†		160†
MD1120F	MR	NPN	136				10	1	40†		160†
MD1121	MR	NPN	102				10	1	40†		160†
MD1121F	MR	NPN	136				10	1	40†		160†
MD1122	MR	NPN	102				10	1	40†		160†
MD1122F	MR	NPN	136				10	1	40†		160†
MD1123	MR	PNP	102				10	1	40†		160†
MD1123F	MR	PNP	136				10	1	40†		160†
MD1124	MR	PNP	102				10	1	40†		160†
MD1124F	MR	PNP	136				10	1	40†		160†
MD1125	MR	PNP	102				10	1	40†		160†
MD1125F	MR	PNP	136				10	1	40†		160†
MD1126	MR	NPN	102				1	500 μ A	15†		
MD1127	MR	NPN	102				1	500 μ A	15†		
MD1128	MR	NPN	102				10	1	25†		
MD1129	MR	NPN	102				10	100 μ A	100†		300†
MD1129F	MR	NPN	102				10	100 μ A	100†		300†
MD1130	MR	PNP	102				10	100 μ A	100†		300†
MD1130F	MR	PNP	102				10	100 μ A	100†		300†
MD1132	MR	NPN	102				5	1	50†		
MD1132F	MR	NPN	136				5	1	50†		
MDS33	SC	PNP	13				500mV	10	40†	80†	140†
MDS34	SC	PNP	13				500mV	40	20†		
MDS39	SC	PNP	17				500mV	10	30†	80†	140†
ME209	ME	NPN	17								
ME213	ME	NPN	13				5	1	70		300
ME214	ME	NPN	17								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			100	200	450		MC104
			60	300	450		MC105
			100	300	450		MC106
			60	50	150		MC107
			60	50	150		MCS2135
							MCS2136
			60	50	150		MCS2137
			60	50	150		MCS2138
			18	50	30		MD499
			12	50	60		MD501
			20	50	25		MD502
			20	50	25		MD503
			25	50	30		MD504
			30	200	500		MD981
			30	200	250		MD981F
			50	200	500		MD982
			50	200	250		MD982F
			20		500		MD984
			30	500	500		MD985
			30	500	250		MD985F
			15	500	500		MD986
			15	500	250		MD986F
			35	600	500		MD990
			30	500	500		MD1120
			30	500	250		MD1120F
			30	500	500		MD1121
			30	500	250		MD1121F
			30	500	500		MD1122
			30	500	250		MD1122F
			40	200	500		MD1123
			40	200	250		MD1123F
					500		MD1124
			40	200	500		MD1124
			40	200	250		MD1124F
			40	200	500		MD1125
			40	200	250		MD1125F
			15	200	300		MD1126
			15	200	300		MD1127
			15	200	300		MD1128
			30	200	500		MD1129
			30	200	250		MD1129F
			40	200	500		MD1130
			40	200	250		MD1130F
			15	50	300		MD1132
			15	50	250		MD1132F
			10	50	60		MDS33
			15	50	60		MDS34
			10	50	60		MDS39
							ME209
			20	200	360		ME213
							ME214

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
ME216	ME	NPN	17				1	10	50		
ME217	ME	NPN	17				1	10	110		
ME501	ME	NPN	102				5	100 μ A	60†		
ME502	ME	NPN	102				10	10	750†		
ME503	ME	NPN	102				5	100 μ A	30†		
ME504	ME	NPN	102				5	100 μ A	100†		
ME509	ME	NPN	102								
ME510	ME	NPN	17				5	1004A	100†		
ME900	ME	NPN	17	5		2nA	5	1	100		
ME901	ME	NPN	17	5		2nA	5	1	100		
MPT101	MFD	PNP	1	12	4 μ A	30 μ A	6	1	20	30	40
MPT102	MFD	PNP	1				6	1	40	50	60
MPT103	MFD	PNP	1				6	1	60	75	100
MPT106	MFD	PNP	1								
MPT107	MFD	PNP	1								
MPT108	MFD	PNP	1								
MPT121	MFD	PNP	1				6	1		30	
MPT122	MFD	PNP	1				6	1		50	
MPT123	MFD	PNP	1				6	1		100	
MPT151	MFD	PNP	1					1		30	
MPT152	MFD	PNP	1					1		50	
MPT153	MFD	PNP	1					1		80	
MHM1001	MH	NPN	13				5	1	1000		
MHM1101	MH	NPN	13				5	0.1	500†		
MHT1802	MH	PNP	25								
MHT1803	MH	PNP	25								
MHT1804	MH	PNP	25								
MHT1902	MH	PNP	118								
MHT1903	MH	PNP	118								
MHT1904	MH	PNP	118								
MHT2002	MH	PNP	105								
MHT2003	MH	PNP	105								
MHT2004	MH	PNP	105								
MHT4402	MH	NPN	13				10	10	20†		
MHT4411	MH	NPN	17								
MHT4412	MH	NPN	17								
MHT4413	MH	NPN	17								
MHT4414	MH	NPN	17								
MHT4415	MH	NPN	17								
MHT4416	MH	NPN	17								
MHT4417	MH	NPN	13								
MHT4418	MH	NPN	13								
MHT4419	MH	NPN	13								
MHT4511	MH	NPN	85								
MHT4512	MH	NPN	85								
MHT4513	MH	NPN	85								
MHT4514	MH	NPN	85								
MHT4515	MH	NPN	85								
MHT4516	MH	NPN	85								
MHT4517	MH	NPN	85								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	0.3	10*	20	200	360		ME216
			20	200	360		ME217
							ME501
			80				ME502
							ME503
							ME504
							ME509
							ME510
5	50μA	4*			360		ME900
5	50μA	4*			360		ME901
				50			MFT101
5	0.5	8		50			MFT102
6	0.5	8		50			MFT103
				100	150		MFT106
				100	150		MFT107
				100	150		MFT108
				250	200		MFT121
				250	200		MFT122
				250	200		MFT123
				150	200		MFT151
				150	200		MFT152
				150	200		MFT153
			40		400		MHM1001
			40		260		MHM1101
			60	65A			MHT1802
			45	65A			MHT1803
			30	65A			MHT1804
			60	65A			MHT19C2
			45	65A			MHT1903
			30	65A			MHT1904
			60	65A			MHT2002
			45	65A			MHT2003
			30	65A			MHT2004
			100		800		MHT4402
			40	600	4.0W		MHT4411
			40	600	4.0W		MHT4412
			40	600	4.0W		MHT4413
			60	600	4.0W		MHT4414
			60	600	4.0W		MHT4415
			60	600	4.0W		MHT4416
			80	600	4.0W		MHT4417
			80	600	4.0W		MHT4418
			80	600	4.0W		MHT4419
			40	600	10.0W†		MHT4511
			40	600	10.0W†		MHT4512
			40	600	10.0W†		MHT4513
			60	600	10.0W†		MHT4514
			60	600	10.0W†		MHT4515
			60	600	10.0W†		MHT4516
			80	600	10.0W†		MHT4517

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
MHT4518	MH	NPN	85								
MHT4519	MH	NPN	85								
MHT6001	MH	NPN	73				5	1A	10†		
MHT6011	MH	NPN	73				5	1A	20†		60†
MHT6012	MH	NPN	73				5	1A	20†		60†
MHT6013	MH	NPN	73				5	1A	40†		120†
MHT6014	MH	NPN	73				5	1A	40†		120†
MHT6015	MH	NPN	73				5	1A	100†		
MHT6016	MH	NPN	73				5	1A	100†		
MM486	MR	NPN	17				10	150	20†		60†
MM487	MR	NPN	17				10	150	20†		40†
MM488	MR	NPN	17				10	150	100†		300†
MM511	MR	NPN	17				10	150	20†		60†
MM512	MR	NPN	17				10	150	40†		120†
MM513	MR	NPN	17				10	150	100†		300†
MM1154	MR	PNP	9				10	3	15		
MM1613	MR	NPN	17					150	40†		120†
MM1614	MR	PNP	17					1	25†		
MM1711	MR	NPN	17					150	100†		300†
MM1712	MR	PNP	17					1	50†		
MM1803	MR	NPN	73				2	400	5†		50†
MM1941	MR	NPN	17				10	10	25†	50†	
MM1943	MR	NPN	17				10	10	25†	50†	
MM2503	MR	PNP	9				6	3	25		
MM2613	MR	NPN	17					150	40†		120†
MM2614	MR	PNP	17					1	25†		
MM2711	MR	NPN	17					150	100†		300†
MM2712	MR	PNP	17					1	50†		
MN19	MR	PNP	13				1	10		40	
MN24	MR	PNP	16				2	700		30	
MN25	MR	PNP	16				2	700		45	
MN26	MR	PNP	16				2	700		60	
MN32	MR	PNP					12	500	30†		70†
MN48	MR	PNP					12	500		100†	
MN49	MR	PNP	16				4	1A	60†	90†	140†
MN61A	MR	PNP	16				12	500		60	
MN62A	MR	PNP	16				12	500		60	
MN63A	MR	PNP	16				12	500		60	
MN64A	MR	PNP	16				12	500		60	
MP500	MR	PNP	25				2	15A			
MP500A	MR	PNP	25				2	15A	30†	47†	60†
MP501	MR	PNP	25								
MP501A	MR	PNP	25				2	15A	30†	47†	60†
MP502	MR	PNP	25				2	15A	30†	47†	60†
MP502A	MR	PNP	25				2	15A	30†	47†	60†
MP503	MR	PNP	25				2	15A	30†	47†	60†
MP503A	MR	PNP	25				2	15A	30†	47†	60†
MP504	MR	PNP	25				2	15A	50†	63†	100†
MP504A	MR	PNP	25				2	15A	50†	63†	100†
MP505	MR	PNP	25				2	15A	50†	63†	100†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			80	600	10.0W†		MHT4518
			80	600	10.0W†		MHT4519
			50	5A	40.0W†		MHT6001
			40	5A	40.0W†		MHT6011
			80	5A	40.0W†		MHT6012
			40	5A	40.0W†		MHT6013
			80	5A	40.0W†		MHT6014
			40	5A	40.0W†		MHT6015
			80	5A	40.0W†		MHT6016
			30		800		MM486
			30		800		MM487
			30		800		MM488
			30		500		MM511
			30		500		MM512
			30		500		MM513
				50	100		MM1154
							MM1613
							MM1614
							MM1711
							MM1712
				200	300		MM1941
				200	300		MM1943
15				20	75		MM2503
							MM2613
							MM2614
							MM2711
							MM2712
			60	2A	25.0W†		MM8013
					125		MN19
				3A	10.0W		MN24
				3A	10.0W		MN25
				3A	10.0W		MN26
				3A			MN32
				3A			MN48
			40	50	250		MN49
			30	10A	50.0W†		MN61A
			45	10A	50.0W†		MN62A
			60	10A	50.0W†		MN63A
			75	10A	50.0W†		MN64A
			30	60A	170.0W†		MP500
			30	60A	170.0W†		MP500A
			45	60A	170.0W†		MP501
			45	60A	170.0W†		MP501A
			60	60A	170.0W†		MP502
			60	60A	170.0W†		MP502A
			75	60A	170.0W†		MP503
			75	60A	170.0W†		MP503A
			30	60A	170.0W†		MP504
			30	60A	170.0W†		MP504A
			45	60A	170.0W†		MP505

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{CO}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
MP505A	MR	PNP	25				2	15A	50†	63†	100†
MP506	MR	PNP	25				2	15A	50†	63†	100†
MP506A	MR	PNP	25				2	15A	50†	63†	100†
MP507	MR	PNP	25				2	15A	50†	63†	100†
MP507A	MR	PNP	25				2	15A	50†	63†	100†
MP1549	MR	PNP	16				2	1A		52†	
MP1550	MR	PNP	16				2	1A		52†	
MP1551	MR	PNP	16				2	1A		52†	
MP1552	MR	PNP	16				2	1A		52†	
MP1553	MR	PNP	16				2	1A		73†	
MP1554	MR	PNP	16				2	1A		73†	
MP1555	MR	PNP	16				2	1A		73†	
MP1556	MR	PNP	16				2	1A		73†	
MP1557	MR	PNP	16				2	1A		125†	
MP1558	MR	PNP	16				2	1A		125†	
MP1559	MR	PNP	16				2	1A		125†	
MP1560	MR	PNP	16				2	1A		125†	
MP2060	MR	PNP	16				2	3A	30†		200†
MP2060-1	MR	PNP	16				2	3A	30†		45†
MP2060-2	MR	PNP	16				2	3A	40†		60†
MP2060-3	MR	PNP	16				2	3A	50†		75†
MP2060-4	MR	PNP	16				2	3A	60†		90†
MP2060-5	MR	PNP	16				2	3A	80†		120†
MP2060-6	MR	PNP	16				2	3A	100†		150†
MP2060-7	MR	PNP	16				2	3A	130†		200†
MP2061	MR	PNP	16				2	3A	30†		200†
MP2061-1	MR	PNP	16				2	3A	30†		45†
MP2061-2	MR	PNP	16				2	3A	40†		60†
MP2061-3	MR	PNP	16				2	3A	50†		75†
MP2061-4	MR	PNP	16				2	3A	60†		90†
MP2061-5	MR	PNP	16				2	3A	80†		120†
MP2061-6	MR	PNP	16				2	3A	100†		150†
MP2061-7	MR	PNP	16				2	3A	130†		200†
MP2062	MR	PNP	16				2	3A	30†		200†
MP2062-1	MR	PNP	16				2	3A	30†		45†
MP2062-2	MR	PNP	16				2	3A	40†		60†
MP2062-3	MR	PNP	16				2	3A	50†		75†
MP2062-4	MR	PNP	16				2	3A	60†		90†
MP2062-5	MR	PNP	16				2	3A	80†		120†
MP2062-6	MR	PNP	16				2	3A	100†		150†
MP2062-7	MR	PNP	16				2	3A	130†		200†
MP2063	MR	PNP	16				2	3A	30†		200†
MP2063-1	MR	PNP	16				2	3A	40†		60†
MP2063-2	MR	PNP	16				2	3A	40†		60†
MP2063-3	MR	PNP	16				2	3A	50†		75†
MP2063-4	MR	PNP	16				2	3A	60†		90†
MP2063-5	MR	PNP	16				2	3A	80†		120†
MP2063-6	MR	PNP	16				2	3A	100†		150†
MP2063-7	MR	PNP	16				2	3A	130†		200†
MT10	ME	PNP	13				6	1		22	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			45	60A	170.0W†		MP505A
			60	60A	170.0W†		MP506
			60	60A	170.0W†		MP506A
			75	60A	170.0W†		MP507
			75	60A	170.0W†		MP507A
			20	15A	90.0W†		MP1549
			30	15A	90.0W†		MP1550
			40	15A	90.0W†		MP1551
			50	15A	90.0W†		MP1552
			20	15A	90.0W†		MP1553
			30	15A	90.0W†		MP1554
			40	15A	90.0W†		MP1555
			60	15A	90.0W†		MP1556
			20	15A	90.0W†		MP1557
			30	15A	90.0W†		MP1558
			40	15A	90.0W†		MP1559
			50	15A	90.0W†		MP1560
			25	7A	50.0W†		MP2060
			25	7A	50.0W†		MP2060-1
			25	7A	50.0W†		MP2060-2
			25	7A	50.0W†		MP2060-3
			25	7A	50.0W†		MP2060-4
			25	7A	50.0W†		MP2060-5
			25	7A	50.0W†		MP2060-6
			25	7A	50.0W†		MP2060-7
			35	7A	50.0W†		MP2061
			35	7A	50.0W†		MP2061-1
			35	7A	50.0W†		MP2061-2
			35	7A	50.0W†		MP2061-3
			35	7A	50.0W†		MP2061-4
			35	7A	50.0W†		MP2061-5
			35	7A	50.0W†		MP2061-6
			35	7A	50.0W†		MP2061-7
			50	7A	50.0W†		MP2062
				7A	50.0W†		MP2062-1
			50	7A	50.0W†		MP2062-2
			50	7A	50.0W†		MP2062-3
			50	7A	50.0W†		MP2062-4
			50	7A	50.0W†		MP2062-5
			50	7A	50.0W†		MP2062-6
			50	7A	50.0W†		MP2062-7
			60	7A	50.0W†		MP2063
			60	7A	50.0W†		MP2063-1
			60	7A	50.0W†		MP2063-2
			60	7A	50.0W†		MP2063-3
			60	7A	50.0W†		MP2063-4
			60	7A	50.0W†		MP2063-5
			60	7A	50.0W†		MP2063-6
			60	7A	50.0W†		MP2063-7
			50				MT10

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{CO}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
MT19	ME	PNP	13				6	1			80
MT87	ME	PNP	13				6	1			38
MT88	ME	PNP	13				6	1			80
MT100	GIC	NPN	81				1	10	45†		
MT101	GIC	NPN	81				2.5	0.2	100†		
MT102	GIC	NPN	81				1	10	50†		
MT706	HA	NPN	108				1	10	20†		
MT706A	HA	NPN	108				1	10	20†		60†
MT706B	HA	NPN	108				1	10	20†		60†
MT708	HA	NPN	152				1	10	20†		60†
MT753	HA	NPN	152				1	10	40†		120†
MT760	ME	PNP	13				6	1		40	
MT761	ME	PNP	13				6	1		75	
MT762	ME	PNP	13				6	1		100	
MT763	ME	PNP	13				6	1		120	
MT764	ME	PNP	13				6	1		200	
MT1038	SGS	NPN	17								
MT1039	SGS	NPN	17								
N104B	FC	NPN	13				5	10	45†		
N400A	FC	NPN	13				10	150	100		300
NKT4	NM	PNP	13				0.4	150	30†		
NKT5	NM	PNP	13				0.2	60	26†		
NKT24	NM	PNP	13								
NKT25	NM	PNP	13								
NKT32	NM	PNP	13				6	1	40		180
NKT33	NM	PNP	13				6	1	25		125
NKT42	NM	PNP	13				6	1	40		180
NKT43	NM	PNP	13				6	1	25		125
NKT52	NM	PNP	13				4.5	1		100	
NKT53	NM	PNP	13				4.5	1		80	
NKT54	NM	PNP	13				4.5	1		50	
NKT63	NM	PNP	17				4.5	1		80	
NKT101	NM	PNP	5				4.5	1	50	150	
NKT102	NM	PNP	5				4.5	1	50	100	
NKT103	NM	PNP	5				4.5	1	50	75	
NKT104	NM	PNP	5				4.5	1	50	150	
NKT105	NM	PNP	5				4.5	1	50	100	
NKT106	NM	PNP	5				4.5	1	50	75	
NKT107	NM	PNP	5				4.5	1	50	150	
NKT108	NM	PNP	5				4.5	1	50	100	
NKT109	NM	PNP	5				4.5	1	50	75	
NKT121	NM	PNP	13				4.5	1	50	150	
NKT122	NM	PNP	13				4.5	1	50	100	
NKT123	NM	PNP	13				4.5	1	50	75	
NKT124	NM	PNP	13				4.5	1	50	150	
NKT125	NM	PNP	13				4.5	1	50	100	
NKT126	NM	PNP	13				4.5	1	50	75	
NKT127	NM	PNP	13				4.5	1	40	150	
NKT128	NM	PNP	13				4.5	1	50	100	
NKT129	NM	PNP	13				4.5	1	50	75	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			25				MT19
			25				MT87
			25				MT88
					100		MT100
					150		MT101
			15		150		MT102
			15	50	250		MT706
			15	50	250		MT706A
			15	50	250		MT706B
			15	50	250		MT708
					250		MT753
			15				MT760
			10				MT761
			10				MT762
			6				MT763
			20				MT764
			15	250	300		MT1038
			15	250	300		MT1039
			20		250		N104B
			30		600		N400A
			10	500	90		NKT4
			10	500	90		NKT5
			10	500	90		NKT24
			10	500	90		NKT25
2	0.5	22*	10	5	27		NKT32
2	0.5	22*	10	5	27		NKT33
2	0.5	22*	10	5	27		NKT42
2	0.5	22*	10	5	27		NKT43
			6	10	75		NKT52
			6	10	75		NKT53
			6	10	75		NKT54
			6	10	75		NKT63
			20	500	75		NKT101
			20	500	75		NKT102
			20	500	75		NKT103
			20	500	75		NKT104
			20	500	75		NKT105
			20	500	75		NKT106
			20	500	75		NKT107
			20	500	75		NKT108
			20	500	75		NKT109
			20	500	75		NKT121
			20	500	75		NKT122
			20	500	75		NKT123
			20	500	75		NKT124
			20	500	75		NKT125
			20	500	75		NKT126
			20	500	75		NKT127
			20	500	75		NKT128
			20	500	75		NKT129

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
NKT131	NM	PNP	5				4.5	1	50	150	
NKT132	NM	PNP	5				4.5	1	40	80	
NKT133	NM	PNP	5				4.5	1	30	50	
NKT134	NM	PNP	5				4.5	1	30	50	
NKT141	NM	PNP	17				4.5	1	50	150	
NKT142	NM	PNP	17				4.5	1	40	80	
NKT143	NM	PNP	17				4.5	1	30	50	
NKT144	NM	PNP	17				4.5	1	30	50	
NKT151	NM	PNP	5				4.5	1		150	
NKT152	NM	PNP	5				4.5	1		100	
NKT153/25	NM	PNP	5				4.5	1		80	
NKT154/25	NM	PNP	5				4.5	1		50	
NKT162	NM	PNP	17				4.5	1		100	
NKT163/25	NM	PNP	17				4.5	1		80	
NKT164/25	NM	PNP	17				4.5	1		50	
NKT165	NM	PNP	17								
NKT172	NM	PNP	13				4.5	1		100	
NKT173/25	NM	PNP	13				4.5	1		80	
NKT174/25	NM	PNP	13				4.5	1		50	
NKT175	NM	PNP	13								
NKT201	NM	PNP	5				4.5	500	30†		90†
NKT202	NM	PNP	5				4.5	25	50†		200†
NKT203	NM	PNP	5				4.5	1	50		200
NKT204	NM	PNP	5				4.5	1	30		60
NKT205	NM	PNP	5				4.5	1	15		45
NKT206	NM	PNP	5				4.5	1	50		150
NKT207	NM	PNP	5				4.5	25	50†		200†
NKT208	NM	PNP	5				4.5	500	30†		90†
NKT211	NM	PNP	13				6	1	15		120
NKT212	NM	PNP	13				6	1	15		120
NKT213	NM	PNP	13				4.5	1	50		125
NKT214	NM	PNP	13				4.5	1	30		75
NKT215	NM	PNP	13				4.5	1	15		45
NKT216	NM	PNP	13				4.5	1	50		125
NKT217	NM	PNP	13				6	1	15		120
NKT218	NM	PNP	13				6	1	15		120
NKT221	NM	PNP	13				4.5	500	30†		90†
NKT222	NM	PNP	13				4.5	25	50†		200†
NKT223	NM	PNP	13				4.5	1	50		200
NKT224	NM	PNP	13				4.5	1	30		90
NKT225	NM	PNP	13				4.5	1	15		45
NKT226	NM	PNP	13				4.5	1	50		150
NKT227	NM	PNP	13				4.5	25	50†		200†
NKT228	NM	PNP	13				4.5	500	30†		90†
NKT231	NM	PNP	13				4.5	1	70	110	180
NKT232	NM	PNP	13				1.5	150	90†	150†	220†
NKT251	NM	PNP	5				1.5	200	50†		
NKT252	NM	PNP	5				1.5	200	50†		
NKT253	NM	PNP	5				1.5	200	25†		
NKT254	NM	PNP	5				4.5	1	85		250

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			15		125		NKT131
			15		125		NKT132
			15		125		NKT133
			15		125		NKT134
2	0.5	22*	12	25	125		NKT141
2	0.5	22*	12	25	125		NKT142
2	0.5	22*	12	25	125		NKT143
2	0.5	6*	12	25	125		NKT144
			6	10	75		NKT151
			6	10	75		NKT152
			6	10	75		NKT153/25
			6	10	75		NKT154/25
			9	25	75		NKT162
			9	25	75		NKT163/25
			9	25	75		NKT164/25
			6	10			NKT165
			9	10	75		NKT172
			9	10	75		NKT173/25
			9	10	75		NKT174/25
			6	10			NKT175
6	1	30*	30	500	300		NKT201
6	1	15*	30	125	180		NKT202
6	1	15*	30	125	180		NKT203
6	1	15*	30	125	180		NKT204
6	1	15*	30	125	180		NKT205
6	1	6*	30	125	180		NKT206
6	1	15*	60	125	180		NKT207
6	1	30*	30	500	300		NKT208
2	0.5	30*	32	500	200		NKT211
2	0.5	15*	32	125	200		NKT212
2	0.5	15*	32	125	200		NKT213
2	0.5	15*	32	125	200		NKT214
2	0.5	15*	32	125	200		NKT215
2	0.5	6*	32	125	200		NKT216
2	0.5	15*	60	125	200		NKT217
2	0.5	30*	32	500	200		NKT218
6	1	30*	30	500	300		NKT221
6	1	15*	30	125	180		NKT222
6	1	15*	30	125	180		NKT223
6	1	15*	30	125	180		NKT224
6	1	15*	30	125	180		NKT225
6	1	6*	30	125	180		NKT226
6	1	15*	60	125	180		NKT227
6	1	30*	30	500	300		NKT228
2	0.5	5	15	500	300		NKT231
2	0.5	5	15	500	300		NKT232
2	0.5	30*	18	500	300		NKT251
2	0.5	15*	12	25	180		NKT252
2	0.5	30*	18	500	300		NKT253
2	0.5	15*	12	25	180		NKT254

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
NKT255	NM	PNP	5				4.5	1	25		75
NKT261	NM	PNP	17				1.5	200	50†		
NKT262	NM	PNP	17				4.5	1	35		90
NKT263	NM	PNP	17				1.5	200	25†		
NKT264	NM	PNP	17				4.5	1	85		250
NKT265	NM	PNP	17				4.5	1	25		90
NKT270	NM	PNP	13				4.5	1	35		
NKT271	NM	PNP	13				1.5	200	50†		
NKT272	NM	PNP	13				4.5	1	35		90
NKT273	NM	PNP	13				1.5	200	25†		
NKT274	NM	PNP	13				4.5	1	85		250
NKT275	NM	PNP	13				4.5	1	25		90
NKT275J	NM	PNP	13				4.5	1	50		
NKT278	NM	PNP	13				4.5	1	45		
NKT279A	NM	PNP	13								
NKT301	NM	PNP	13					2A	30†		150†
NKT302	NM	PNP	13					50	50†		200†
NKT303	NM	PNP	13					2A	30†		150†
NKT304	NM	PNP	13					50	50†		200†
NKT351	NM	PNP	13					50	50†		200†
NKT352	NM	PNP	13					1A	20†		
NKT361	NM	PNP	6					1A	15†		
NKT362	NM	PNP	6					1A	20†		
NKT401	NM	PNP	16				1.5	1A	20†		75†
NKT402	NM	PNP	15				1.5	1A	50†		150†
NKT403	NM	PNP	16				1.5	1A	50†		150†
NKT404	NM	PNP	16				1.5	1A	50†		150†
NKT405	NM	PNP	16				1.5	1A	100†		200†
NKT450	NM	PNP	16				1.5	1A	30†		
NKT451	NM	PNP	16				1.5	1A	50†		150†
NKT452	NM	PNP	16				1.5	1A	30†		90†
NKT453	NM	PNP	16				1.5	1A	15†		45†
NKT454	NM	PNP	16				1.5	1A	30†		
NKT501	NM	PNP	25				1.5	25A	12†		
NKT502	NM	PNP	25				1.5	25A	12†		
NKT503	NM	PNP	25				1.5	10A	12†		
NKT504	NM	PNP	25				1.5	10A	12†		
NKT675	NM	PNP	13				4.5	1	40		
NKT676	NM	PNP	13				4.5	1	40		
NKT677	NM	PNP	13				4.5	1	40		
NKT701	NM	NPN	13				4.5	1	50		150
NKT703	NM	NPN	13				1.5	50	50†		150†
NKT713	NM	NPN	13				1.5	50	50†		150†
NKT751	NM	NPN	13				1.5	50	30†		
NKT752	NM	NPN	13				4.5	1	30		
NKT773	NM	NPN	13				1.5	200	50†		
NKT774	NM	NPN	13				1.5	200	25†		
NS060	NAT	NPN					5	1		15	
NS061	NAT	NPN					5	1		16	
NS063	NAT	NPN					5	1		29	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
2	0.5	10*	9	10	90		NKT255
2	0.5	30*	15	500	300		NKT261
2	0.5	15*	15	125	300		NKT262
2	0.5	30*	15	500	300		NKT263
2	0.5	15*	15	125	300		NKT264
2	0.5	10*	15	125	300		NKT265
			30	125	200		NKT270
2	0.5	30*	15	500			NKT271
2	0.5	15*	15	125	200		NKT272
2	0.5	30*	15	500	200		NKT273
2	0.5	15*	15	125	200		NKT274
2	0.5	10*	15	125	200		NKT275
2	0.5	15*	15	125	200		NKT275J
			15	125	200		NKT278
							NKT279A
			40	2A	750		NKT301
			40	2A	750		NKT302
			20	2A	750		NKT303
			20	2A	750		NKT304
			30	2A	750		NKT351
			15	2A	750		NKT352
			30	2A	750		NKT361
			15	2A	750		NKT362
			60	6A	1.3W		NKT401
			45	6A	1.3W		NKT402
			60	6A	1.3W		NKT403
			45	6A	1.3W		NKT404
			45	8A	1.3W		NKT405
			36	3A	7.0W†		NKT450
			36	2A			NKT451
			36	2A			NKT452
			36	2A			NKT453
			20	3A	13W		NKT454
			60	25A	90.0W†		NKT501
			30	25A	90.0W†		NKT502
			60	25A	90.0W†		NKT503
			30	25A	90.0W†		NKT504
			20	10	80		NKT675
			20	10	80		NKT676
			20	10	80		NKT677
			10	100	150		NKT701
			15	200	150		NKT703
			25	300	150		NKT713
			10	200	150		NKT751
			15	100	150		NKT752
			15	300	150		NKT773
				300	150		NKT774
	30*			25	150		NS060
	30*			25	500		NS061
	30*			25	150		NS063

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
NS064	NAT	NPN					5	1		30	
NS066	NAT	NPN					5	1		54	
NS067	NAT	NPN					5	1		38	
NS069	NAT	NPN					5	1		63	
NS070	NAT	NPN					5	1		52	
NS072	NAT	NPN					5	1		200	
NS073	NAT	NPN					5	1		95	
NS075	NAT	NPN					20	1		65	
NS078	NAT	NPN					20	1		99	
NS100	NAT	PNP					6	1		50	
NS101	NAT	PNP					6	1		20	
NS117	NAT	PNP	17	15		10 μ A					
NS118	NAT	PNP	17	15		10 μ A					
NS119	NAT	PNP	17	15		10 μ A					
NS120	NAT	PNP	17	15		10 μ A					
NS200	NAT	NPN	17				5	10	15†		
NS345	NAT	NPN	17				1	10	80†		200†
NS381	NAT	NPN	17				0.4	3	20†		60†
NS382	NAT	NPN	17				0.4	3	40†		120†
NS383	NAT	NPN	17				0.4	3	20†		60†
NS384	NAT	NPN	17				0.4	3	40†		120†
NS430	NAT	NPN	17				4	1	40†		120†
NS431	NAT	NPN	17				4	1	80†		250†
NS432	NAT	NPN	17				4	1	150†		450†
NS433	NAT	NPN	17				4	1	40†		130†
NS434	NAT	NPN	17				4	1	80†		250†
NS435	NAT	NPN	17				4	1	150†		450†
NS436	NAT	NPN	17				4	1	40†		120†
NS437	NAT	NPN	17				4	1	80†		250†
NS438	NAT	NPN	17				4	1	150†		450†
NS475	NAT	NPN	17				5	1	20		50
NS476	NAT	NPN	17				5	1	40		100
NS477	NAT	NPN	17				5	1	80		300
NS478	NAT	NPN	17				5	1	20		50
NS479	NAT	NPN	17				5	1	40		100
NS480	NAT	NPN	17				5	1	80		300
NS661	NAT	NPN	13						50		
NS662	NAT	NPN	13						24		60
NS663	NAT	NPN	13						16		36
NS664	NAT	NPN	13						7		22
NS665	NAT	NPN	13						50		
NS666	NAT	NPN	13						24		60
NS667	NAT	NPN	13						16		36
NS668	NAT	NPN	13						7		22
NS731	NAT	NPN	13				5	1	12		55
NS732	NAT	NPN	13				5	1	40		125
NS733	NAT	NPN	13				5	1	12		55
NS734	NAT	NPN	13				5	1	40		125
NS1000	NAT	PNP	13				5	1	14		32
NS1001	NAT	PNP	13				5	1	28		65

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
	30*			25	500		NS064
	30*			25	150		NS066
	30*			25	500		NS067
				25	150		NS069
	30*			25	500		NS070
				25	150		NS072
				25	500		NS073
				20	125		NS075
				20	125		NS078
				100	400		NS100
				100	400		NS101
			15	100	400		NS117
			15	100	400		NS118
				100	400		NS119
				100	400		NS120
				100	300		NS200
					300		NS345
					300		NS381
					300		NS382
					300		NS383
					300		NS384
					500		NS430
					500		NS431
					500		NS432
					500		NS433
					500		NS434
					500		NS435
					500		NS436
					500		NS437
					500		NS438
				100	400		NS475
				100	400		NS476
				100	400		NS477
				100	400		NS478
				100	400		NS479
				100	400		NS480
					400		NS661
					400		NS662
					400		NS663
					400		NS664
					150		NS665
					150		NS666
					150		NS667
					150		NS668
			15		400		NS731
			25		400		NS732
			30		400		NS733
			30		400		NS734
			60		400		NS1000
			60		400		NS1001

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
NS1002	NAT	PNP	13				5	1	14		32
NS1110	NAT	NPN	17								
NS1111	NAT	NPN	17								
NS6062(BK)	NAT	PNP	134				3	0.1	45		90
NS6063(R)	NAT	PNP	134				3	0.1	70		150
NS6064(Y)	NAT	PNP	134				3	0.1	115		230
NS6065(BL)	NAT	PNP	134				3	0.1	180		340
NS7000	NAT	NPN	135				5	1	150		600
NS7070	NAT	NPN	153				5	1	150		600
NS9713	NAT	NPN	134				1	3	20†	50†	
OC2A	VH	PNP	5				4.5	1	25		50
OC2B	VH	PNP	5				4.5	1	25		50
OC2C	VH	PNP	5								
OC3A	VH	PNP	5				4.5	1	40		80
OC3B	VH	PNP	5				4.5	1	40		80
OC3C	VH	PNP	5								
OC3L	VH	PNP	13				6	1		70	
OC3LR	VH	PNP	13				6	1		70	
OC4A	VH	PNP	5				4.5	1	70		150
OC4B	VH	PNP	5				4.5	1	70		150
OC4C	VH	PNP	5								
OC4H	VH	PNP	13				6	1		80	
OC4LP	VH	PNP	13				0.5	100		150	
OC5K	VH	PNP	13				6	1		120	
OC5N	VH	PNP	13				6	1		150	
OC16	PHIL MULL VAL TES	PNP	2	14	60 μA	2.5mA	14	30	17†	40†	110†
OC16D	AMP	PNP					7	300		22	
OC16E	AMP	PNP					7	300		30	
OC16G	AMP	PNP					7	300		40	
OC16R	MULL	PNP	2				2	1A	15†		40†
OC16T	MULL	PNP	2				2	1A	30†		40†
OC16W	MULL	PNP	2				2	1A	30†		40†
OC19	MULL	PNP	16				7	300	16†	45†	90†
OC20	MULL	PNP	16				1	1A	25†		75†
OC22	AMP PHIL MULL VAL RO	PNP	16				2	400		180	
OC23	AMP PHIL MULL VAL RO	PNP	16				2	400		180	
OC24	MULL VAL PHIL RO	PNP	16				2	400		180	
OC25	MULL	PNP	16				1	1A	15†		80†
OC26	AMP PHIL MULL VAL RO	PNP	16				1	1A	20†	35†	55†
OC27	MULL PHIL TES	PNP	16					1A		75†	
OC28	RO MULL VAL AMP	PNP	16				1	1A	20†		55†
OC29	AMP MULL VAL RO	PNP	16				1	1A	45†		130†
OC30	AMP PHIL MULL VAL RO	PNP	16				7	100		36†	
OC32	INT	PNP	5				1.5	1	9		16
OC33	INT	PNP	5				1.5	1	16		32
OC34	INT	PNP	5				1.5	1	32		
OC35	AMP MULL VAL RO	PNP	16				1	1A	25†		75†
OC36	RO MULL VAL AMP	PNP	16				1	1A	30†		110†
OC37	INT	PNP	5								
OC38	INT	PNP	5								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			110		400		NS1002
					500		NS1110
					500		NS1111
	1.5	0.1	8*	100	150		NS6062 (BK)
	1.5	0.1	6*	100	150		NS6063 (R)
	1.5	0.1	6*	100	150		NS6064 (Y)
	1.5	0.1	6*	100	150		NS6065 (BL)
	10µA	1.5			200		NS7000
5	10µA	1.5			200		NS7070
			15		500		NS9713
	0.5	15*	30	100	120		OC2A
3	0.5	15*	30	100	120		OC2B
3			30	100	80		OC2C
	0.5	15*	30	100	120		OC3A
	0.5	15	30	120	120		OC3B
3			30	100	80		OC3C
					150		OC3L
					150		OC3LR
	0.5	15*	30	100	120		OC4A
3	0.5	15*	30	120	120		OC4B
3			30	100	80		OC4C
		16*			150		OC4H
			200		150		OC4LP
					150		OC5K
					150		OC5N
			16	1.5A	6.0W†		OC16
			13	2A			OC16D
			26	2A			OC16E
			26	2A			OC16G
			32	3A	7.0W†		OC16R
			32	3A	7.0W†		OC16T
			15	1.5A			OC16W
			16	1.5	7.5W†		OC19
			75	8A	30.0W†		OC20
			24	1A	4.0W†		OC22
			24	1A	4.0W†		OC23
			24	1A	15.0W†		OC24
			40	4A	22.0W†		OC25
			16	3.5A	12.5W†		OC26
			16	3.5A	12.0W†		OC27
			60	6A	12.0W†		OC28
			48	6A	30.0W†		OC29
			16	1.4A	900		OC30
1.5	0.5	17	15	50	50		OC32
1.5	0.5	17	15	50	50		OC33
1.5	0.5	17	15	50	50		OC34
			32	6A	30.0W†		OC35
			32	6A	30.0W†		OC36
			30		65		OC37
			9		65		OC38

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
OC41	MULL	PNP	1	15	2 μ A	10 μ A		10	20†	40†	90†
OC42	MULL	PNP	1	15	2 μ A	10 μ A		10	40†	80†	
OC43	MULL	PNP	1	15	2 μ A	10 μ A		50	50†	100†	200†
OC44	RO PHIL MULL VAL AMP	PNP	1				6	1	40	100	225
OC44M(Y)	MULL	PNP	13								
OC45	PHIL VULL VAL AMP RO	PNP	1				6	1	25	40	125
OC45M(BL)	MULL	PNP	13								
OC45M(O)	MULL	PNP	13								
OC46	PHIL VAL AMP RO	PNP	1					15	20†		80†
OC47	PHIL VAL AMP RO	PNP	1					15	50†		200†
OC50	MULL PHIL VAL	PNP(PC)	13/22				6	1	120		
OC51	MULL VAL PHIL	PNP(PC)	13/22								
OC53	AMP	PNP	24					0.25		35	
OC54	AMP	PNP	24					0.25		55	
OC55	AMP	PNP	24					0.25		80	
OC56	AMP	PNP	24								
OC57	PHIL MULL VAL AMP RO	PNP	13	0.5		100 μ A	1.5	0.25	20	35	60
OC58	PHIL MULL VAL RO TES	PNP	13	0.5		100 μ A	0.5	0.25	30	55	85
OC59	PHIL MULL VAL RO TES	PNP	13	0.5		100 μ A	0.5	0.25	50	80	120
OC60	RO PHIL MULL VAL AMP	PNP	13	0.5		120 μ A	1.5	3		80	
OC65	PHIL MULL AMP	PNP	1				2	0.5	20	30	40
OC66	PHIL MULL AMP	PNP	1				2	3	41	47	
OC70	MULL PHIL VAL RO TES	PNP	1	4.5	110 μ A	225 μ A	2	0.5	20	30	40
OC71	MULL PHIL VAL RO TES	PNP	1	4.5	150 μ A	325 μ A	2	3	30	47	75
OC71N	AMP	PNP	13	4.5	150 μ A	325 μ A	2	3	30	47	75
OC72	PHIL MULL VAL RO TES	PNP	1	6	125 μ A	300 μ A	6	8		50	
OC73	PHIL MULL	PNP	1				4.5	0.5	30	45	65
OC74	PHIL VAL AMP RO TES	PNP	1					300		65†	
OC75	RO PHIL MULL VAL AMP	PNP	1	4.5	350 μ A	500 μ A	2	3	65	90	130
OC76	RO PHIL MULL VAL	PNP	1	6	200 μ A	600 μ A	5.4	10	45†		330†
OC77	RO PHIL MULL VAL	PNP	1	6	200 μ A	600 μ A	5.4	10	45†		330†
OC77M	RAD	PNP	17					10	45†		
OC78	MULL	PNP	1				1	125	25†		
OC78D	MULL	PNP	1				1	125	25†		
OC79	PHIL VAL AMP RO	PNP	1				6	50	35†	60†	110†
OC80	RO PHIL VAL AMP	PNP	1				6	50		180†	
OC81	MULL	PNP	1				1	200	50†		
OC81D	MULL	PNP	1				2	3	25		
OC81DM	MULL	PNP	13				10		20		
OC81M(BK)	MULL	PNP	13				1	100	45†		
OC82	MULL	PNP	1				1	250	45†		
OC82D	MULL	PNP	1				1	250	45†		
OC82DM	MULL	PNP	13								
OC83	MULL RO	PNP	1				6	1		90	
OC84	MULL RO	PNP	1				6	1		90	
OC122	MULL RO PHIL	PNP	3				6	100	50†	140†	
OC123	MULL RO PHIL	PNP	3				6	100	50†	160†	
OC139	RO PHIL MULL VAL	NPN	1				4.5	3	15†	20†	
OC140	RO PHIL MULL VAL	NPN	1					15		75	
OC141	RO PHIL VAL	NPN	1					15		150	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			15	50	83		OC41
			15	50	43		OC42
			15	50	50		OC43
			10	5	75		OC44
							OC44M(Y)
			10	5	75		OC45
							OC45M(BL)
5	1	25*	20	100	100		OC45M(O)
5	1	25*	20	100	100		OC46
							OC47
4.5	1.5	53	20	20	75		OC50
		53	30	15	75		OC51
			3	10	10		OC53
			3	10	10		OC54
			3	10	10		OC55
			3	10	10		
3	0.5	10	3	5	10		OC56
2	0.5	10	3	5	10		OC57
2	0.5	10	3	5	10		OC58
2	0.5	15*	3	5	10		OC59
							OC60
3	0.5	9	10	10	25		OC65
3	0.5	9	10	10	25		OC66
2	0.5	10	20	10	125		OC70
3	0.5	10	20	10	125		OC71
2	0.5	10	30	10	110		OC71N
2	0.5	15*	12	125	125		OC72
3	0.5	10	30	10	125		OC73
6	5	15	20	300	550		OC74
3	0.5	10	20	10	75		OC75
2	0.5	15*	32	125	75		OC76
2	0.5	15*	60	125	75		OC77
				125	180		OC77M
			10	70			OC78
			9	10			OC78D
6	5	15	26	300	550		OC79
			32	300	550		OC80
			15	200	300		OC81
			15	10	150		OC81D
			16	10	150		OC81DM
			10	60			OC81M(BK)
			16	200	300		OC82
			16	10	150		OC82D
			16	10	170		OC82DM
2	5	8	20	500	160		OC83
3			32	500	160		OC84
			32	500	205†		OC122
			50	500	205†		OC123
5	1	25*	20	200	100		OC139
5	1	25*	20	200	100		OC140
5	1	25*	20	200			OC141

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
OC161	MULL	PNP					1.5	1A	30†		40†
OC169	AMP VAL PHIL RO TES	PNP	3				6	1	20	60	100
OC170	PHIL MULL VAL RO TES	PNP	3				6	1	20	100	200
OC171	AMP VAL RO PHIL	PNP	3				6	1	20	100	
OC200	RO MULL VAL AMP	PNP	1				6	1	15	20	60
OC201	RO MULL VAL AMP	PNP	1				6	1	20	30	80
OC202	MULL	PNP	1				6	1	45	70	120
OC203	RO MULL	PNP	1				6	1	10	15	
OC204	MULL	PNP	1				6	10		40	
OC205	MULL RO	PNP	1				6	1		40	
OC206	MULL	PNP	1				6	1		40	
OC207	MULL	PNP	1				6	1	20	50	120
OC303	INT BC	PNP	13				5	1	16	24	32
OC304/1	INT BC	PNP	13				5	1	30	40	50
OC304/2	BC INT	PNP	13				5	1	50	65	80
OC304/3	BC INT	PNP	13				5	1	80	100	120
OC305	BC INT	PNP	13				5	1	120	150	200
OC305/1	BC INT	PNP	13				5	1	120	150	200
OC305/2	BC INT	PNP	13				5	1	200	230	
OC306/1	BC INT	PNP	13				5	1	30	40	50
OC306/2	BC INT	PNP	13				5	1	50		80
OC306/3	BC INT	PNP	13				5	1	80	100	120
OC307	INT BC	PNP	13	6		300	0.7	125	25†		
OC307/1	BC INT	PNP	13				0.5	250	20†		40†
OC307/2	BC INT	PNP	13				0.5	250	30†		60†
OC307/3	BC INT	PNP	13				0.5	250	50†		100†
OC308	INT BC	PNP	4	6		300	5.4	10	35†		135†
OC309	INT BC	PNP	4	6		300	0.1	125	25†		
OC309/1	BC INT	PNP	17				0.5	250	20†		40†
OC309/2	BC INT	PNP	17				0.5	250	30†		60†
OC309/3	BC INT	PNP	17				0.5	250	50†		100†
OC318	INT BC	PNP	4					300		66	
OC320	INT	PNP	24				5	1	9		16
OC330	INT	PNP	24				4.5	1	16	24	32
OC331	INT BC	PNP	4				2	0.5	20	26	32
OC340	INT	PNP	24				4.5	1	32	70	120
OC341	INT	PNP	4				2	0.5	32	41	50
OC342	INT	PNP	4				2	0.5	50	65	80
OC343	INT	PNP	4				2	0.5	80	100	120
OC350	INT	PNP	4				4.5	1	120	150	
OC351	INT	PNP	4				4.5	0.5	120	170	
OC360	INT	PNP	4				4.5	1	20		
OC361	INT	PNP	4				2	0.5	32	41	50
OC362	INT	PNP	4				2	0.5	50	65	80
OC363	INT	PNP	4				2	0.5	80	100	120
OC390	INT BC	PNP	1						20	40	
OC400	INT BC	PNP	1						20	75	
OC410	INT BC	PNP	1						20	110	
OC430	BC INT	PNP	13	10	0.4	2	4.5	1	10	15	20
OC430K	INT BC	PNP	13	10	0.4	2	4.5	1	10	15	20

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
6	1	18		10	50		OC161
6	1	18	20	10	60		OC169
6	1	15	20	10	60		OC170
3	0.5	8	25	50	250		OC171
							OC200
3.5	0.5	6	25	50	250		OC201
3	0.5	8	15	50	250		OC202
3	0.5	8	60	50	250		OC203
2	0.5	7	24	125	300		OC204
2	0.5	7	60	250	300		OC205
2	0.5	7	24	250	300		OC206
2	0.5	7	50	250	310		OC207
4	0.3	5	15	50	67		OC303
4	0.3	5	15	50	67		OC304/1
4	300μA	5	15	50	67		OC304/2
4	0.3	5	15	50	67		OC304/3
4	0.3	5	8	50	67		OC305
4	0.3	5	8	50	67		OC305/1
4	0.3	5	8	50	67		OC305/2
5	1	5*	15	50	67		OC306/1
5	1	5*	15	50	67		OC306/2
			15	50	67		OC306/3
			18	250	75		OC307
			18	250	110.0†		OC307/1
			18	250	110.0†		OC307/2
			18	250	110.0†		OC307/3
			60	250	75		OC309
			30	250	110.0†		OC309/1
			30	250	110.0†		OC309/2
			30	250	110.0†		OC309/3
			20	300	135		OC318
1	0.5	18	15	35	35		OC320
1.5	0.5	12	15	35	45		OC330
		12	7	30	45		OC331
1.5	0.5	12	15	35	45		OC340
		12	7	30	45		OC341
		12	7	30	30		OC342
		12	7	30	30		OC343
1.5	0.5	12	8	35	45		OC350
		12	5	30	30		OC351
1.5	0.5	5	15	35	45		OC360
		5	7	30	30		OC361
		5	7	30	30		OC362
		5	7	30	30		OC363
			5		45		OC390
			5		45		OC400
			3		45		OC410
			10	50	330		OC430
			10	50	660		OC430K

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
OC440	INT BC	PNP	13	30	400nA	2	5	1	10	15	20
OC440K	INT BC	PNP	13	30	400nA	2	5	1	10	15	20
OC445	INT BC	PNP	13	50	400nA	2	6	1	10	15	20
OC445K	INT BC	PNP	13	50	400nA	2	6	1	10	15	20
OC450	INT BC	PNP	13	75	400nA	1	5	1	10	20	40
OC450K	INT BC	PNP	13	75	400nA	2	5	1	10	20	40
OC460	INT BC	PNP	13	10	400nA	2	5	1	10	30	60
OC460K	INT BC	PNP	13	10	400nA	2	5	1	20	30	60
OC463	INT BC	PNP	13	10	400nA	2	5	1	20	30	50
OC463K	INT	PNP	13	10	400nA	2	5	1	20	30	50
OC465	INT BC	PNP	13	20	400nA	2	5	1	20	30	60
OC465K	INT	PNP	13	20	400nA	2	5	1	20	30	60
OC466	INT BC	PNP	13	10	400nA	2	5	1	20	30	50
OC466K	INT BC	PNP	13	10	400nA	2	5	1	20	30	50
OC468	INT BC	PNP	13	10	400nA	2	5	1	40	60	70
OC468K	INT	PNP	13	10	400nA	2	5	1	40	60	70
OC469	INT BC	PNP	13	32	400nA	2	5	1	10		
OC469K	INT BC	PNP	13	32	400nA	2	5	1	10		
OC470	INT BC	PNP	13	30	400nA	2	5	1	20	30	50
OC470K	INT	PNP	13	30	400nA	2	5	1	20	30	
OC472											
OC480	INT BC	PNP	13	125		2	5	1	10	15	40
OC480K	INT	PNP	13	125		2	5	1	10	15	40
OC601	TFN	PNP	1				4.5	1	9		20
OC602	TFN	PNP	1				1	2	20	40	50
OC602Spec	TFN	PNP	1				4.5	1		21	49
OC603	TFN	PNP	1				4.5		20	50	
OC604	TFN	PNP	1				1	2	50	65	
OC604Spec	TFN	PNP	1				4.5	1			165
OC612	TFN	PNP	1				6	0.5		60	
OC613	TFN	PNP	1				6	0.5		90	
OC614	TFN	PNP	1				6	0.5		60	
OC615	TFN	PNP	1				6	0.5		110	
OC615M	TFN	PNP	1				6	0.5		150	
OC615V	TFN	PNP	1				6	0.5		160	
OC622	TFN	PNP	39				1	0.5	20	40	50
OC622	TFN	PNP	39				1	2	20	50	150
OC624	TFN	PNP	39				1	2	50	65	150
OC700	BC	PNP	13				6	1	20	30	80
OC700A	BC	PNP	13				6	1	15	25	35
OC700B	BC	PNP	13				6	1	20	30	80
OC701	BC	PNP	13				6	1	25	35	45
OC701K	BC	PNP	13				6	1	25	35	45
OC702	BC	PNP	13				6	1	45	70	90
OC702A	BC	PNP	13				6	1	45	70	90
OC702B	BC	PNP	13				6	1	45	70	90
OC703	BC	PNP	13				6	1	10	15	25
OC703A	BC	PNP	13				6	1	10	15	25
OC704	BC	PNP	13				2	1	30	70	
OC740	BC	PNP	17								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			30	50	330		0C440
			30	50	660		0C440K
			30	50	330		0C445
			50	50	660		0C445K
			50	50	330		0C450
			50	50	660		0C450K
			10	50	330		0C460
			10	50	660		0C460K
			10	50	330		0C463
			10	50	660		0C463K
			20	50	330		0C465
			20	50	660		0C465K
0.7	0.5	8	10	50	330		0C466
0.7	0.5	8	10	50	660		0C466K
			10	50	300		0C468
			10	50	660		0C468K
			20	50	300		0C469
			20	50	660		0C469K
			30	50	330		0C470
			30	50	660		0C470K
			125	50	300		0C472
			125	50	660		0C480
1.5	0.5	20*	20	20	50		0C480K
6	0.2	3	12	50	50		0C601
							0C602
			30	500	100		0C602Spec
6	0.2	3	12	50	50		0C603
6	0.2	3	12	50	50		0C604
			30	500	100		0C604Spec
			10	40	30		0C612
			10	10	30		0C613
			15	10	25		0C614
6	0.5	7	15	10	25		0C615
			12		30		0C615M
			12		30		0C615V
1.0	0.2	5	15	20	25		0C622
1.0	0.2	5	15	20	25		0C623
0.7	0.5	8	25	20	330		0C624
			25		330		0C700
							0C700A
			25		330		0C700B
0.7	0.5	6	80		330		0C701
0.7	0.5	6	80		660		0C701K
0.7	0.5	4	25		330		0C702
							0C702A
0.7	0.5	4	10		330		0C702B
0.7	0.5	4	80		330		0C703
0.7	0.5	4	100		330		0C703A
0.7	0.5	12	3		330		0C704
			15	50	330		0C740

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
OC740M	BC	PNP	17								
OC740Q	BC	PNP	17								
OC742	BC	PNP	17								
OC742M	BC	PNP	17								
OC742Q	BC	PNP	17								
OC810	RFT	PNP	5				5	1	10	13	20
OC811	RFT	PNP	5				5	1	20	28	100
OC812	RFT	PNP	5				5	1	20	41	100
OC813	RFT	PNP	5				5	1	20	28	100
OC814	RFT	PNP	5				5	1	20	40	100
OC815	RFT	PNP	5				6	2	10		20
OC816	RFT	PNP	5				6	2	20		100
OC820	RFT	PNP	5	6		400 μ A					
OC821	RFT	PNP	5	6		500 μ A					
OC822	RFT	PNP	5	6		400 μ A					
OC823	RFT	PNP	5	6		400 μ A					
OC830	RFT	PNP	65	6		1mA					
OC831	RFT	PNP	65	6		1mA					
OC832	RFT	PNP	65	6		1mA					
OC833	RFT	PNP	65	6		1mA					
OC870	RFT	PNP		6		600 μ A					
OC871	RFT	PNP		6		600 μ A					
OC872	RFT	PNP		6		800 μ A					
OD603	TFN	PNP	40	6	350 μ A	1mA	6	0.5		30	
OD603/50	TFN	PNP	40	6	450 μ A	1mA	1	500		25	
OD604	TFN	PNP	23								
OD613	TFN	PNP	40				6	0.5		30	
OD614	TFN	PNP	23								
OD650	AEG	PNP	51				2	1A		80†	
OD650B	AEG	PNP					1.5		43†		190†
OD651	AEG	PNP	51				2	1A		50†	
OD651a	AEG	PNP	51				2	1A		80†	
OD652	AEG	PNP	51				2	1A		50†	
OD750	AEG	NPN	50				6	500	10†		30†
OD751	AEG	NPN	50				6	500	10†	30†	
OD760	AEG	PNP					12	100	10†	15†	
OS13	TOS	PNP	154								
OS14	TOS	PNP	13								
P13	TES	PNP	1	5		800 μ A	5	1	13		
P13	TUN	PNP	54				4.5	1		12	
P13A	TES	PNP	1	5		800 μ A	5	1	32		
P13A	TUN	PNP	54				4.5	1		32	
P13B	TES	PNP	1	5		800 μ A	5	1	13		
P13B	TUN	PNP	54				4.5	1		12	
P14	TES	PNP	1	5		800 μ A	5	1	18		
P14	TUN	PNP	54				4.5	1		18	
P15	TES	PNP	1	5		800 μ A	5	1	18		
P15	TUN	PNP	54				4.5	1		18	
P46		PNP	94								
P346	SGS	NPN	17				2	1	15†	45†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			15	50	330		OC740M
			15	50	330		OC740Q
			25	50	330		OC742
			25	50	330		OC742M
			25	50	330		OC742Q
1	0.2	25*	20	10	25		OC810
1	0.2	25*	10	10	25		OC811
1	0.2	10*	6	5	25		OC812
1	0.2	25*	10	10	25		OC813
1	0.2	5*	6	5	25		OC814
1	1	25*	10	20	50		OC815
1	1	25*	10	20	50		OC816
1	1	25*	10	125	100		OC820
1	1	25*	10	125	100		OC821
1	1	25*	30	125	100		OC822
1	1	25*	30	125	100		OC823
			10	1A			OC830
			10	1A			OC831
			30	1A			OC832
			60	1A			OC833
		20*		10	20		OC870
		20*		10	20		OC871
		15*	10	10	20		OC872
			30	3A	4.0W†		OD603
			50	1A	4.0W†		OD603/50
			27	2A	1.2W		OD604
			30	3A			OD613
							OD614
			25	15A	45.0W†		OD650
				15A			OD650B
			30	15A	45.0W†		OD651
			60	15A	45.0W†		OD651A
			40	30A	45.0W†		OD652
			50	2A	150.0W†		OD750
			50	5A	150.0W†		OD751
				100			OD760
				2	15		OS13
				50	150		OS14
1.5	0.5	33*	15	10	150		P13
1.5	0.5	33*	30	10	150		P13
1.5	0.5	33*	15	10	150		P13A
1.5	0.5	33*	30	10	150		P13A
1.5	0.5	12*	15	10	150		P13B
1.5	0.5	12*	30	10	150		P13B
1.5	0.5	33*	15	10	150		P14
1.5	0.5	33*	30	10	150		P14
1.5	0.5	33*	15	10	150		P15
1.5	0.5	33*	30	10	150		P15
							P46
			10		300		P346

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
P346A	SGS	NPN	17				2	5	20†	53†	
P1013	PCO	PNP	10			4.5	2	70	110	150	
P1314	PCO	PNP	17				12	1		16	
PA1000	AM	PNP	17								
PADT20	AMP	PNP	3				6	1		150	
PADT21	AMP	PNP	3				6	1		150	
PADT22	AMP	PNP	3				6	1		150	
PADT23	AMP	PNP	3				6	1		150	
PADT24	AMP	PNP	3				6	1		150	
PADT25	AMP	PNP	3				6	1		150	
PADT26	AMP	PNP	3				6	1		150	
PADT27	AMP	PNP	3				6	1		150	
PADT28	AMP	PNP	3				12	2		120	
PADT31	AMP	PNP	3				12	1		150	
PADT35	AMP	PNP	3				5	16	32†		
PADT40	AMP	PNP	13				0.5	15	30†		
PAT20	TAG	PNP	17				6	1	10	15	20
PAT21	TAG	PNP	17				6	1	10	15	20
PAT22	TAG	PNP	17				6	1	10	20	
PAT23	TAG	PNP	17				6	1	20	30	
PAT24	TAG	PNP	17				6	1	20	30	
PAT25	TAG	PNP	17				6	1	20	35	50
PAT26	TAG	PNP	17				6	1	10	15	25
PAT27	TAG	PNP	17				6	1	40	60	100
PAT28	TAG	PNP	17				6	1	40	55	100
PAT31	TAG	PNP	17				6	1	10	17	25
PEP5	AEI	NPN	17				1	10	40†		120†
PEP6	AEI	NPN	17				1	10	40†		120†
PEP7	AEI	NPN	17				1	10	40†		120†
PEP8	AEI	NPN	17				1	10	40†		120†
PMT011	PSI						10	150	15†		
PMT012	PSI						10	150	30†		
PMT013	PSI						10	150	20†		
PMT014	PSI						10	150	40†		
PMT015	PSI						10	150	40†		
PMT016	PSI						1	10	20†		
PMT017	PSI						1	10	10†		
PMT018	PSI	PNP	156				10	10		4	
PMT019	PSI	PNP	156				10	10		6	
PMT020	PSI	PNP	156				5	1		37	
PMT021	PSI	PNP	156				10	10	2		
PMT022	PSI	PNP	156				3	10	2		
PMT111	PSI	PNP	155				10	10		3	
PMT112	PSI	PNP	155				10	10		3.5	
PMT113	PSI	PNP	155				10	10		4	
PMT114	PSI	PNP	155				10	10		5	
PMT115	PSI	PNP	155				10	150		40†	
PMT116	PSI	PNP	155				10	10		4	
PMT117	PSI	PNP	155				10	10		4	
PMT118	PSI	PNP	155				10	10		4	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			12		300		P346A
							P1013
							P1314
5	10 μ A	3*	25		360		PA1000
				10	83		PADT20
				10	83		PADT21
				10	83		PADT22
				10	100		PADT23
				10	100		PADT24
				10	100		PADT25
				10	100		PADT26
				10	100		PADT27
		6*		10	100		PADT28
		6*		10	100		PADT31
			50	30	200		PADT35
				30	94		PADT40
6	0.5	8	10	50	250		PAT20
6	0.5	8	50	50	250		PAT21
6	0.5	8	75	50	250		PAT22
6	0.5	8	10	50	250		PAT23
			50	50	250		PAT24
			30	50	225		PAT25
			100	50	225		PAT26
			10	50	225		PAT27
			30	50	225		PAT28
			30	50	225		PAT31
			15	10	300		PEP5
			15	10	300		PEP6
			15	10	300		PEP7
			15	10	300		PEP8
					100		PMT011
					100		PMT012
					100		PMT013
					100		PMT014
					100		PMT015
					100		PMT016
					100		PMT017
					100		PMT018
					100		PMT019
					100		PMT020
			15	220	100.0W†		PMT021
			20	220	100.0W†		PMT022
					100		PMT111
					100		PMT112
					100		PMT113
					100		PMT114
					250		PMT115
					100		PMT116
			220		360		PMT117
					100		PMT118

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I'_{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
PMT119	PSI	NPN	155				10	10		6	
PMT120	PSI	NPN	155				10	10		5	
PT515	PSI	NPN	17								
PT516	PSI	NPN	17								
PT517	PSI	NPN	17								
PT518	PSI	NPN	13				50	30		13	
PT520	PSI	NPN	13				50	30		13	
PT522	PSI	NPN	13				28	100	7†		
PT523	PSI	NPN	13				28	100	15†		50†
PT530	PSI	NPN	13				28	350	7.5	35	75
PT530-1	PSI	NPN	13				28	350	7†	30†	
PT600	PSI	NPN	13				12	1	35		
PT601	PSI	NPN	13				12	1	65		
PT706	PSI	NPN	13				1	10	20†	40†	60†
PT706-1	PSI	NPN	13				1	10	40†	80†	120†
PT706A	PSI	NPN	13				1	10	20†	40†	60†
PT706A-1	PSI	NPN	13				1	10	40†	80†	120†
PT720	PSI	NPN	13				10	0.1	40†	80†	
PT801	PSI	NPN	13				10	150	15†		45†
PT802	PSI	NPN	13				10	150	30†		90†
PT822	PSI	NPN	13				10	150	40†	75†	120†
PT850	PSI	NPN	13				10	150	40†		
PT850A	PSI	NPN	17				10	150	40†		
PT851	PSI	NPN	13				10	100	40†	90†	150†
PT852	PSI	NPN	13				10	100	12†	25†	50†
PT853	PSI	NPN	13				10	150	10†		
PT900	PSI	NPN	69				2	10A	10†		
PT901	PSI	NPN	69				10	150	40†		120†
PT902	PSI	NPN	69								
PT903	PSI	NPN	35								
PT3500	TRW	NPN	17				24	50	10†		100†
PT3502	TRW	NPN	17				30	50	10†		60†
PT3690	TRW	NPN	133								
PXA101	ES	PNP	1				5	1	20	35	
PXA102	ES	PNP	1				5	1	25	60	
PXA111	ES	PNP	13				5	1	20	35	
PXA112	ES	PNP	13				5	1	25	50	
PXA191	ES	PNP	13				5	1		33	
PXA192	ES	PNP	13				5	1		60	
PXB103	ES	PNP	1				5	1	40	66	185
PXB113	ES	PNP	13				5	1	40	66	105
PXB133	ES	PNP	13				5	1	40	66	105
PXC101	ES	PNP	1				6	8		66	
PXC101A	ES	PNP	13				6	8		66	
PXC121	ES	PNP	13				1	200	40†	74†	
PXC131	ES	PNP	13				1	200	40†	72†	
PXC171	ES	PNP	13				1	400	40†	72†	
PXC181	ES	PNP	13				1	125	44†	77†	
QR6007	PCO	NPN	17				1	10	20†		
R2	RLD	PNP	10				1.5	1		100	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
					100		PMT119
					100		PMT120
			100	75	850		PT515
			100	75	850		PT516
			100	75	850		PT517
			90	75	850		PT518
			90	75	850		PT520
			40		2.0W†		PT522
			40		2.0W†		PT523
			60	1.2A	2.5W†		PT530
			45	1.2A	2.5W†		PT530-1
			45				PT600
			45				PT601
			15	220	360		PT706
			15	220	360		PT706-1
			25	200	360		PT706A
			25	200	360		PT706A-1
			15	200	360		PT720
			25	500	840		PT801
			30	500	840		PT802
			200	30A	250.0W†		PT822
			80	500	2.0W†		PT850
			80	500	2.8W†		PT850A
			30		600		PT851
			30		600		PT852
			20		600		PT853
			50	10A	125.0W†		PT900
			100	10A	125.0W†		PT901
			100	15A			PT902
			100	15A			PT903
			40	600	880		PT3500
			40	600	1.0W		PT3502
			40	1.2A			PT3690
			16		60		PXA101
			16		60		PXA102
			10		60		PXA111
			10		60		PXA112
			16		50		PXA191
			16		50		PXA192
2	0.5	6	16		90		PXB103
			16		90		PXB113
2	0.5	6	26		75		PXB133
2	0.5	6	16		100		PXC101
			16		100		PXC101A
			16		150		PXC121
			16		300		PXC131
			16		450		PXC171
			26		83		PXC181
			25	200	300		QR6007
							R2

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
R3	RLD	PNP	10				1.5	1		100	
RA1	GE	NPN	9				5	1	10†		120†
RA1A	GE	NPN	9				5	1		65	
RA1B	GE	NPN	9				5	1		65	
RA1C	GE	NPN	9				5	1		65	
RA2	GE	NPN	9				5	1		65	
RA2A	GE	NPN	9				5	1		65	
RA2B	GE	NPN	9				5	1		65	
RA3	GE	NPN	9				5	1		65	
RA3A	GE	NPN	9				5	1		65	
RA3B	GE	NPN	9				5	1		65	
RD2517A	BO	NPN	5				4.5	1	5.5	13	19
RD2521A	BO	NPN	5				4.5	1	18	40	99
RD2525A	BO	NPN	5				4.5	1	100	145	
RT482	RAY RHE	NPN	13				10	30	20†		
RT483	RAY RHE	NPN	13				10	150	20†		60†
RT484	RAY RHE	NPN	13				10	150	40†		120†
RT497M	RHE	NPN	17				10	200		20†	
RT498M	RHE	NPN	17				10	200		20†	
RT656M	RHE	NPN	17				10	200		60†	
RT657M	RHE	NPN	17				10	200		60†	
RT696AM	RHE	NPN	17				10	5		70	
RT696M	RHE	NPN	17				10	5		45	
RT697AM	RHE	NPN	17				5	1	30	70	
RT697M	RAY RHE	NPN	17				5	1	30	70	
RT698M	RHE	NPN	17				2	150		40	
RT699AM	RHE	NPN	17				10	5		70	
RT699M	RHE	NPN	17				0.7	150		40†	
RT1420M	RHE	NPN	17				10	5		170	
RT1613M	RHE	NPN	17				10	150		80†	
RT5001	RHE	NPN	17				10	300	20†	40†	60†
RT5002	RHE	NPN	17				10	300	40†	75†	120†
RT5003	RHE	NPN	17				10	300	20†	40†	60†
RT5004	RHE	NPN	17				10	300	40†	75†	120†
RT5151	RAY RHE	NPN	17				5	5	35		
RT5152	RAY RHE	NPN	17				5	1	35		
RT5202	RHE	NPN	17								
RT5203	RAY RHE	NPN	17								
RT5204	RAY RHE	NPN	17				5	1	30	50	90
RT5212	RAY RHE	NPN	13				5	1	30	50	90
RT5230	RAY	NPN	13				4	0.2	40	50	
RT5401	RAY	NPN	13				10	50	170	230	340
RT5402	RAY	NPN	13				10	50	200	300	400
RT5403	RAY	NPN	13				10	50	160	220	320
RT5404	RAY	NPN	13				10	50	150	210	300
RT5411	RAY	NPN	17				20	10		40†	
RT5412	RAY	NPN	17				20	10		40†	
RT5413	RAY	NPN	17				20	10		40†	
RT5804	RAY	NPN	17								
RT7007E	RAY	NPN	17				10	150		40†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			45	10	300		R3
			45	10	300		RA1
			45	10	300		RA1A
			45	10	300		RA1B
			45	10	300		RA1C
			45	10	300		RA2
			45	10	300		RA2A
			45	10	300		RA2B
			60	10	300		RA3
			60	10	300		RA3A
			60	10	300		RA3B
4.5	1	20	30	10	50		RD2517A
4.5	1	20	40	10	50		RD2521A
4.5	1	20	25	5	25		RD2525A
			20	30	600		RT482
			20	30	600		RT483
			20	30	600		RT484
				500	3.0W†		RT497M
				500	400		RT498M
				500	3.0W†		RT656M
				500	3.0W†		RT657M
					400		RT696AM
					400		RT696M
					400		RT697AM
					400		RT697M
				500	400		RT698M
					400		RT699AM
				500	400		RT699M
				500	400		RT1420M
				500			RT1613M
			40	1A	700		RT5001
			40	1A	700		RT5002
			60	1A	700		RT5003
			60	1A	700		RT5004
			20		600		RT5151
			20		600		RT5152
					5.0W†		RT5202
					600		RT5203
					600		RT5204
			60		600		RT5212
			30		600		RT5230
				750	700		RT5401
				750	700		RT5402
				750	700		RT5403
				750	700		RT5404
					700		RT5411
					700		RT5412
					700		RT5413
					600		RT5804
					450		RT7007E

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
S5T	IMP						10		70†		
S14T	IMP									110†	
S15T	IMP									60†	
S18T	IMP	PNP									
S19T	IMP	PNP						300	20†		160†
S30T	IMP	PNP						300	25†		100†
S31T	IMP	PNP						300	100†		
S32T	IMP	PNP	17					300	30†		300†
S39T	IMP	PNP	16					1A		10†	
S40T	IMP	PNP	16					2A	10†		60†
S40TB	IMP	PNP	16					2A	10†		60†
S41T	IMP	PNP	16					1A	20†		60†
S42T	IMP	PNP	16					1A	20†		55†
S43T	IMP	PNP	16					1A	45		230
S46T	IMP	PNP	16					1A	25		75
S48T	IMP	PNP	16					5A	40†		60†
S49T	IMP	PNP	16					3A	12†		25†
S55TB	IMP	PNP	17					1		70	
S57TB	IMP	PNP						12A	8†		25†
S58TB	IMP	PNP	16					6A	20†		80†
S60T	IMP										
S61T	IMP										
S62T	IMP										
S63T	IMP										
S64T	IMP										
S66T	IMP										
S67T	IMP	NPN	25							50†	
S68T	IMP	NPN	25							70†	
S69T	IMP	PNP	17					30	7†		
S70T	IMP	PNP	1					1	10		250
S80T	IMP	PNP	3				6	1	15		
S87TB	IMP	PNP						1		50	
S88TB	IMP	PNP	17					1		75	
S90T	IMP	PNP	1					1	9		
S91T	IMP	PNP	1					10	14		
S166T	IMP	NPN	25							40†	
S500	SP	PNP	13				6	1	9	18	
S721TB	IMP	NPN	17							15	
S722TB	IMP	NPN	17							30	
S723TB	IMP	NPN	17							50	
S873TB	IMP	PNP						1		50	
S874TB	IMP	PNP						1		50	
S886B	IMP	PNP	17					25	16†		60†
S896B	IMP	PNP	17					25	16†		60†
S3068	FC	NPN	17	60		25 μA	5	10	120†		250†
SA50	SC	PNP	13				3	1	45†		90†
SA51	SC	PNP	13				3	1	10†		25†
SA52	SC	PNP	13				3	1	20†	30†	50†
SA52A	SC	PNP	13				3	1	45†		
SA52B	SC	PNP	13				3	1	20†	30†	50†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			16	125	75		S5T
			15	1A	200		S14T
			15	1A	200		S15T
			20	1A	200		S18T
			20	1A	200		S19T
			10	500	200		S30T
			9	500	200		S31T
							S32T
			16	3A	24.0W†		S39T
							S40T
				3A	24.0W†		S40TB
			32	3.5A	12.5W†		S41T
			60	10A	30.0W†		S42T
			48	10A	30.0W†		S43T
			48	10A	30.0W†		S46T
				10A	10.0W†		S48T
			36	3.6A	12.0W†		S49T
			10	10	50		S55TB
				12A			S57TB
				6A			S58TB
			20	10	50		S60T
			20	10	50		S61T
			20	10	50		S62T
			20	10	50		S63T
			10	30	250		S64T
			20	200	60		S66T
			15	400	120		S67T
			12	400	120		S68T
			28	250	300		S69T
			7.5	10			S70T
				10	50		S80T
				10	75		S87TB
				10	100		S88TB
				90			S90T
				450			S91T
			15	200			S166T
			25	100	150		S500
				25	250		S721TB
				25	250		S722TB
				25	250		S723TB
				10	75		S873TB
				10	75		S874TB
			15	100	120		S886B
			15	100	120		S896B
			28		800		S3068
				50	150		SA50
				50	150		SA51
			30	50	150		SA52
			30	50	150		SA52A
			30	50	150		SA52B

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
SA53	SC	PNP	13				3	1	20†		30†
SA54	SC	PNP	13				3	1	20†		40†
SA55	SC	PNP	13				3	1	25†		40†
SA56	SC	PNP	13				3	1	10†		25†
SA495	SC	PNP	13				6	1	9	18	
SA496	SC	PNP	13				0.5	15	6†	16†	
SA2253	AM	NPN	102								
SA2254	AM	NPN	102								
SA2255	AM	NPN	102								
SAC40	SC	PNP	13				6	1	17	30	120
SAC40M	SC	PNP	13				6	1	17	30	120
SAC40Q	SC	PNP	13				6	1	17	30	120
SAC42	SC	PNP	13				6	1	11	20	80
SAC42M	SC	PNP	13				6	1	11	20	80
SAC42Q	SC	PNP	13				6	1	11	20	80
SB100	PC0 SC SPR	PNP(SB)	10				3	0.5		20	
SB101	SC PC0 SPR	PNP(SB)	10				3	0.5	11	22	33
SB102	SC PC0 SPR	PNP	10				3	0.5	25	35	110
SB103	SC PC0	PNP	10				3	0.5	10	20	
SB128	SC	PNP(SB)	13				3	0.5	19	40	66
SB240	SC	PNP(SB)	10				3	0.5	16	30	
SB344	SC	PNP(SB)	13				3	0.5	11	22	33
SB345	SC	PNP(SB)	13				3	0.5	25		100
SB346	SC	PNP(SB)	13				3	0.5	10		33
SB5122	SPR	PNP	10				3	0.5	16	30	
SC101	SC	NPN	158					0.5	5†		
SC102	SC	NPN	158					0.5	10†		
SC200	SC	NPN	158				10	150	40†		120†
SC201	SC	NPN	158				10	150	100†		300†
SC202	SC	NPN	158				10	150	40†		120†
SC203	SC	NPN	158				10	150	100†		300†
SC400	SC	NPN	158				10	150	40†		120†
SC401	SC	NPN	158				10	150	100†		300†
SDD320	LTT	NPN	25				15	50	20	35	
SDD420	LTT	NPN	17				15	6	30	60	110
SDD820	LTT	NPN	13				15	6	30	60	110
SDD1220	LTT	NPN	13				15	6	30	60	110
SEC115	SEC	NPN	34								
SEC115A	SEC	NPN	34								
SEC116	SEC	NPN	34								
SEC116A	SEC	NPN	34								
SEC440	SEC	NPN	34					1A		10†	
SEC483	SEC	NPN	34					750		15†	
SEC484	SEC	NPN	34					750		15†	
SEC485	SEC	NPN	34					750		15†	
SEC486	SEC	NPN	34					750		35†	
SEC487	SEC	NPN	34								
SEC488	SEC	NPN	34								
SEC489	SEC	NPN	34								
SEC490	SEC	NPN	34								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
				50	150		SA53
				50	150		SA54
				50	150		SA55
				50	150		SA56
			25	50	150		SA495
			10	50	150		SA496
					200		SA2253
					200		SA2254
			15	50	200		SA2255
					150		SAC40
			15	50	150		SAC40M
			15	50	150		SAC40Q
			25	50	150		SAC42
			25	50	150		SAC42M
			25	50	150		SAC42Q
			4.5	5	10		SB100
			5	5	20		SB101
			5	5	20		SB102
			5	5	20		SB103
3	0.5	10	4.5	5	25		SB128
3	0.5	12	6	15	30		SB240
			5	5	30		SB344
			5	5	20		SB345
			5	5	20		SB346
3	0.5	12	6	15	25		SB5122
			10		600		SC101
			15		600		SC102
			30		600		SC200
			30		600		SC201
			30		600		SC202
			30		600		SC203
			30		600		SC400
			30		600		SC401
			30	2A	20.0W†		SDD320
			30	100	600		SDD420
			75		600		SDD820
							SDD1220
							SEC115
							SEC115A
							SEC116
							SEC116A
							SEC440
							SEC483
							SEC484
							SEC485
							SEC486
							SEC487
							SEC488
							SEC489
							SEC490

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
SFT101	CSF	PNP	1				6	1		30	
SFT102	CSF	PNP	1				6	1		50	
SFT103	CSF	PNP	1				6	1		80	
SFT106	CSF	PNP	1				6	1		28	
SFT107	CSF	PNP	1				6	1	25	40	120
SFT108	CSF	PNP	1				6	1	40	70	160
SFT113	SC	PNP	69				2	1A		40†	
SFT114	CSF MFD	PNP	37				5	100		70	
SFT115	CSF MFD	PNP	1				9	1	20	60	150
SFT116	CSF MFD	PNP	1				12	1		60	
SFT117	CSF MFD	PNP	1				12	1	40	60	200
SFT118	CSF MFD	PNP	1				12	1		60	
SFT119	CSF MFD	PNP	1				9	1	20		200
SFT120	CSF MFD	PNP	1				12	1		60	
SFT121	CSF	PNP	1				1	100		30†	
SFT122	CSF	PNP	1				1	100	22	50	85
SFT123	CSF	PNP	1				6	1	55	85	200
SFT124	CSF MFD	PNP	52				6	10		50	
SFT125	CSF MFD	PNP	52				6	10		120	
SFT125P	CSF	PNP	14				6	10		120	
SFT126	CSF MFD	PNP	1				6	1		25	
SFT127	CSF MFD	PNP	1				6	1	20	55	70
SFT128	CSF MFD	PNP	1				6	1		55	
SFT130	CSF MFD	PNP	52				6	10		50	
SFT131	CSF MFD	PNP	52				6	10		120	
SFT131P	CSF	PNP	14				6	10		120	
SFT141	CSF MFD	PNP	1				6	1		32	
SFT142	CSF MFD	PNP	1				6	1	20	50	60
SFT143	CSF	PNP	83				6	10		50	
SFT144	CSF MFD	PNP	83				6	10		90	
SFT145	CSF MFD	PNP	83				6	10		50	
SFT146	CSF MFD	PNP	14				6	10		96	
SFT150	CSF MFD	PNP	37				5	1		50	
SFT151	CSF	PNP	1				6	1		30	
SFT152	CSF	PNP	1				6	1	20	50	60
SFT153	CSF	PNP	1				6	1	60	80	150
SFT155	CSF	PNP					10.5	1.5		60	
SFT172	CSF NP										
SFT186	CSF	NPN	17				10	30	15†	40†	
SFT187	TH	NPN	17				10	30	25†	50†	
SFT211	CSF	PNP	16				5	1A		50	
SFT212	CSF MIS	PNP	16								
SFT213	CSF MFD	PNP	16				5	500		470†	
SFT214	CSF MFD	PNP	16				5	1A		50	
SFT221	TH	PNP	17				1	100		30†	
SFT222	CSF	PNP	13				6	1	30		60
SFT223	CSF	PNP	17				1	100	30†	80†	150†
SFT226	CSF MIS	PNP	13				6	1		40	
SFT227	CSF	PNP	13				6	1		55	
SFT228	CSF MIS	PNP	13				6	1		100	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			12	150	100		SFT101
			12	150	100		SFT102
			12	150	100		SFT103
				100	150		SFT106
				100	150		SFT107
			12	50	80		SFT108
			15		25.0W†		SFT113
			60	3A	25.0W†		SFT114
			40	10	120		SFT115
			20	10	120		SFT116
			20	10	120		SFT117
			20	10	120		SFT118
			20	10	120		SFT119
			20	10	120		SFT120
			12	250			SFT121
			12	250	150		SFT122
			12	250	150		SFT123
			12	500	350		SFT124
			12	500	350		SFT125
			15	500	350		SFT125P
			24	250	150		SFT126
			24	250	150		SFT127
			24	250	150		SFT128
			24	500	550		SFT130
			24	500	550		SFT131
			15	500	550		SFT131P
6	0.5	5	45	250	200		SFT141
6	0.5	5	45	250	200		SFT142
		15*	45	500	350		SFT143
			45	500	350		SFT144
		15*	45	750	550		SFT145
		15*	45	750	550		SFT146
			80	3A	25.0W†		SFT150
6	0.5	8	12	150	150		SFT151
6	0.5	8	12	150	150		SFT152
6	0.5	8	12	150	150		SFT153
				10	120		SFT155
				25	100		SFT172
			140		800		SFT186
			125		800		SFT187
				6A	45.0W†		SFT211
				3A			SFT212
			15	3A	25.0W†		SFT213
			30	3A	25.0W†		SFT214
				250	225		SFT221
			15	250	225		SFT222
			15	250	225		SFT223
				250	150		SFT226
				250	150		SFT227
				250	150		SFT228

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
SFT229	CSF	PNP	17				0.5	10	75†	90†	120†
SFT232	CSF	PNP	13				0.5	50	30†	110†	
SFT233	CSF	PNP	13				0.5	50	30†	110†	
SFT234	CSF	PNP	13				0.5	50	30†		
SFT234A	CSF	PNP	17				0.5	50	30†	90†	
SFT235	CSF	PNP	13				0.5	50	30†		
SFT237(V)	CSF	PNP	17				6	1	70		120
SFT237(W)	CSF	PNP	17				6	1	100		160
SFT238	CSF MFD	PNP	16				2	5A	20†	30†	
SFT239	CSF MFD	PNP	16				2	5A	20†	35†	70†
SFT240	CSF MFD	PNP	16				2	5A	20†	35†	70†
SFT241	CSF	PNP	17				6	1	20	40	60
SFT242	CSF MIS	PNP	17				6	1	40	65	100
SFT243	CSF MIS	PNP	17				6	1	20	55	100
SFT244	CSF MIS	PNP	17				1	100		40†	
SFT245	CSF MIS	PNP	17				1	100		40†	
SFT250	CSF MFD	PNP	16				5	1A		50	
SFT251	CSF	PNP	17				6	1	20	30	50
SFT252	CSF	PNP	17				6	1	40	50	70
SFT253	CSF	PNP	17				6	1	60	80	160
SFT259	CSF	NPN	17				6	1	20		
SFT260	CSF	NPN	17				6	1	20		
SFT261	CSF	NPN	17				6	1	20		
SFT264	CSF NP	PNP	25				2	5A	25†		100†
SFT265	MFD CSF	PNP	25				2	1A		80†	
SFT266	MFD CSF	PNP	25				2	1A		75†	
SFT267	MFD CSF	PNP	25				2	1A		75†	
SFT268	CSF	PNP	25				2	5A	25†	45†	
SFT288	TH	PNP	17				0.3	400	40†		
SFT298	COS	NPN	17				0.5	350	35†	100†	
SFT306	CSF	PNP	13				6	1	15	28	70
SFT307	CSF	PNP	13				6	1	25	40	120
SFT308	CSF	PNP	13				6	1	40	70	160
SFT315	CSF MIS	PNP	13				9	1		8C	
SFT317	CSF MIS	PNP	13				9	1		100	
SFT319	CSF MIS	PNP	13				9	1		40	
SFT320	CSF MIS	PNP	13				9	1		80	
SFT321	CSF MIS	PNP	13				1	100		30†	
SFT322	CSF MIS	PNP	13				1	100		50†	
SFT323	CSF MIS	PNP	13				1	100		85†	
SFT351	CSF MIS	PNP	13				6	1		30	
SFT352	CSF MIS	PNP	13				6	1		50	
SFT353	CSF MIS	PNP	13				6	1		80	
SFT354	CSF MIS	PNP	13				9	1		100	
SFT357	CSF MIS	PNP	13				9	1		100	
SFT357P	CSF NP	PNP	31				9	1		180	
SFT358	COS	PNP	13				9	1		150	
SFT440	TH	NPN	73				10	100	10†	50†	
SFT443A	TH	NPN	73				10	100	15†	40†	
SFT713	TH	NPN	17				4.5	2	30†	65†	90†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
				250	150		SPT229
			30	3A	500		SPT232
			40	3A	500		SPT233
			50	1A	450		SPT234
			60	1A	450		SPT234A
			60	1A	450		SPT235
4	0.5	2.5		100	150		SPT237(V)
4	0.3	2.5		100	150		SPT237(W)
			30	6A	25.0W†		SPT238
			60	6A	25.0W†		SPT239
			80	6A	25.0W†		SPT240
6	0.5	15*		500	225		SPT241
6	0.5	15*		500	225		SPT242
6	0.5	15*		500	225		SPT243
				500	225		SPT244
				500	225		SPT245
			40	3A	25.0W†		SPT250
6	0.5	15*		150	225		SPT251
6	0.5	15*		150	225		SPT252
6	0.5	15*		150	225		SPT253
			15	250	150		SPT259
			15	250	150		SPT260
			15	250	150		SPT261
			15	15A	87.0W†		SPT264
			40	15A	50.0W†		SPT265
			50	15A	50.0W†		SPT266
			60	15A	50.0W†		SPT267
			70	15A	87.0W†		SPT268
				500	150		SPT288
				500	150		SPT298
				100	150		SPT306
				100	150		SPT307
				100	150		SPT308
				10	150		SPT315
				10	150		SPT317
				10	150		SPT319
				10	150		SPT320
				250	200		SPT321
				250	200		SPT322
				250	200		SPT323
				150	200		SPT351
				150	200		SPT352
				150	200		SPT353
				10	120		SPT354
				10	120		SPT357
				10	120		SPT357P
				10	120		SPT358
			80	1A	5.0W†		SPT440
			80		5.0W†		SPT443A
			18	200	300		SPT713

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
SFT714	TH	NPN	17				4.5	2	75†	130†	225†
SL100	NAT	NPN	119				1	3	20†	50†	
SL200	NAT	PNP	119				5	10	50†	75†	150†
SL201	NAT	PNP	119				5	1	35†	50†	150†
SL300	NAT	NPN	119				5	1	150†		600†
SL301A	SC		159				5	5	30†		150†
SL301E	SC		159				5	5	25†		250†
SN101	CSC	NPN	13				10	500	10†	25†	
SN102	CSC	NPN	13				10	500	10†	25†	
SN109	CSC	NPN	13				10	500	10†	25†	
SN110	CSC	NPN	13				10	500	10†	25†	
S01	SPR	PNP(SB)	45				3	0.5	8		
S02	SPR	PNP(SB)	45				3	0.5	8		
S03	SPR	PNP(SB)	45				3	0.5	8		
SP8300	SGS	NPN	102				1.0	10	30†		
SP8302	SGS	NPN	102				5	1	76	125	200
SP8303	SGS	NPN	102				5	1	36	65	90
SP8304	SGS	NPN	102				1.0	10	30†	55†	
SP8307	SGS	NPN	102				1.0	10	35†		140†
SP8308											
SP8309	SGS	NPN	102				10	0.1	20†	50†	
SP8310	SGS	NPN	102				10	0.1	35†	80†	
SP8311	SGS	NPN	102				5	1	30	70	
SP8400	SGS	NPN	17								
SP8401	SGS	NPN	17								
SP8402	SGS	NPN	17								
SP8411	SGS	NPN	102				5	10 μ A	60†		
SP8411A	SGS	NPN	102				5	10 μ A	60†		
SP8412	SGS	NPN	102				5	10 μ A	150†		
SP8412A	SGS	NPN	102				5	10 μ A	150†		
SP8413	SGS	PNP	102	5		10nA	5	1	150†		
SP8413A	SGS	PNP	102	5		2nA	5	1	150†		
SP8414	SGS	NPN	102	5		10nA	5	1	300†		
SP8414A	SGS	NPN	102	5		2nA	5	1	300†		
SP8588A	SGS	NPN	102				5	10 μ A	150†		
SPC40	SC	NPN	17								
SPC42	SC	NPN	17								
SPC50	SC	NPN	137								
SPC51	SC	NPN	137								
SPC52	SC	NPN	137								
SSA43	SC										
SSA46	SC										
SSA48	SC										
SST610	SSP	NPN	17				7	50		12k	
ST01	SC	NPN	17				10	0.1		36	
ST02	SC	NPN	17								
ST03	SC	NPN	17								
ST04	SC	NPN	17								
ST05	SC	NPN	17								
ST06	SC	NPN	17				5	50	80†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			18	200	300		SFT714
			12		200		SL100
					250		SL200
					250		SL201
					250		SL300
			16		600		SL301A
			12		600		SL301B
			140	1A	8.7W		SN101
			120	1A	8.7W		SN102
			140	1A	8.7W		SN109
			65	1A	8.7W		SN110
				5	20		SO1
				5	15		SO2
				5	20		SO3
			15		300		SP8300
10	0.3	2	80		500		SP8302
10	0.3	5	60		500		SP8303
			15		400		SP8304
			15		400		SP8307
							SP8308
			30		500		SP8309
			30		500		SP8310
			80		500		SP8311
			80		600		SP8400
			20	500	600		SP8401
			60		600		SP8402
					300		SP8411
					300		SP8411A
					300		SP8412
					300		SP8412A
5	10μA	4*	45		300		SP8413
5	10μA	4*	45		300		SP8413A
5	10μA	3*	45		300		SP8414
5	10μA	3*	60		300		SP8414A
							SP8588A
			10		360		SPC40
			10		360		SPC42
			6	50			SPC50
			6	50			SPC51
			6	50			SPC52
				50	90		SSA43
				50	90		SSA46
				50	90		SSA48
			30	500	500		SST610
			14		300		ST01
			20		360		ST02
			20		360		ST03
			20		360		ST04
			20		360		ST05
			35		360		ST06

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
ST5	NEC	PNP	49								
ST9	TT	NPN	13								
ST10	TT	NPN	13				6	1	30	60	200
ST11	TT	NPN	13				6	1	10	16	25
ST12	TT	NPN	13				6	1	20	30	50
							6	1	40	60	100
ST13	TT	NPN	13				6	1	30	45	60
ST14	TT	NPN	13				6	1	80	130	200
ST15	TT	NPN	13				6	1	10	50	100
ST20A	NEC	PNP	13				6	1		85	
ST20AR	NEC	PNP	13				6	1		85	
ST20E	NEC	PNP	13				1	0.1		150†	
ST25A	NEC	NPN	13				9	1	9		24
ST25B	NEC	NPN	13				9	1	16		48
ST25C	NEC	NPN	13				9	1	24		100
ST27A	NEC	PNP	13				6	1		50	
ST27B	NEC	PNP	13				6	1		50	
ST28A	NEC	PNP	13				6	1		50	
ST28B	NEC	PNP	13				6	1		50	
ST28C	NEC	PNP	13				6	1		50	
ST29	TT	NPN	12				6	1	30	60	200
ST29	NEC	PNP	13				6	1	30	50	200
ST30	TT	NPN	13				6	1	10	16	25
ST31	TT	NPN	13				6	1	20	30	50
ST32	TT	NPN	13				6	1	40	60	100
ST33	TT	NPN	13				6	1	30	45	60
ST34	TT	NPN	13				6	1	80	130	200
ST34F	NEC	PNP	13				6	1		48	
ST34FR	NEC	PNP	13				6	1		48	
ST34G	NEC	PNP	13				1	50		70†	
ST34GR	NEC	PNP	13				1	50		70†	
ST34H	NEC	PNP	13				6	1		48	
ST35	TT	NPN	13				6	1	10	50	100
ST35	NEC	PNP	26				2	100		70†	
ST35R	NEC	PNP	26				2	100		70†	
ST36	NEC	PNP	16				2	100		70†	
ST37C	NEC	PNP	13				6	1		50	
ST37D	NEC	PNP	13				6	1		50	
ST37E	NEC	PNP	13				6	1		50	
ST40	TT	NPN	13				6	1	10	16	25
ST41	TT	NPN	13				6	1	20	30	50
ST42	TT	NPN	13				6	1	40	60	100
ST44	TT	NPN	13				6	1	80	130	200
ST45	TT	NPN	13				6	1	10	50	100
ST50	SC	NPN	17				1	10	30†	55†	120†
ST53	SC	NPN	17				1	10	40†		160†
ST55	SC	NPN	17				1	10	40†		
ST56	SC	NPN	17				1	10	40†		
ST60	SC	NPN	17								
ST61	SC	NPN	17								
ST62	SC	NPN	17								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			25		700		ST5
6	1	19	15		150		ST9
6	1	22	15		200		ST10
6	1	20	15		200		ST11
6	1	20	15		200		ST12
6	1	19	15		200		ST13
6	1	20	15		200		ST14
6	1	22	15		200		ST15
6	1	11	18	30	100		ST20A
6	1	11	18	30	140		ST20AR
			15	30	100		ST20E
				15	150		ST25A
				15	150		ST25B
				15	150		ST25C
				2	20		ST27A
				2	20		ST27B
				2	20		ST28A
				2	20		ST28B
				2	20		ST28C
6	1	9	30		150		ST29
6	1	19		2	20		ST29
6	1	22	30		200		ST30
6	1	20	30		200		ST31
6	1	20	30		200		ST32
6	1	19	30		200		ST33
6	1	20	30		200		ST34
6	1	10		50	125		ST34F
6	1	10		50	180		ST34FR
6	1	10		100	180		ST34G
6	1	10		100	125		ST34GR
6	1	5		50	100		ST34H
6	1	22	30		200		ST35
				200	500		ST35
				200	700		ST35R
				2A	10.0W†		ST36
				2	20		ST37C
				2	20		ST37D
			25	50	20		ST37E
6	1	22	45		200		ST40
6	1	20	45		200		ST41
6	1	20	45		200		ST42
6	1	20	45		200		ST44
6	1	22	45		208		ST45
			12		300		ST50
			12		300		ST53
			15		300		ST55
			20		300		ST56
			15		360		ST60
			15		360		ST61
			15		360		ST62

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
ST66	PCL	NPN	16				4	3A	10†		50†
ST70	SC	NPN	17				1	3	20†	50†	
ST71	SC	NPN	17				1	3	20†		60†
ST72	SC	NPN	17				1	3	50†		
ST80	SC	NPN	17				1	10	25†		160†
ST95A	SC	NPN	17				350mV	10	50†		200†
ST150	SC	NPN	17								
ST151	SC	NPN	17				10	150	20†		300†
ST152	SC	NPN	17				10	150	20†		300†
ST153	SC	NPN	17				10	150	20†		300†
ST154	SC	NPN	17				10	150	20†		300†
ST155	SC	NPN	17				10	150	20†		300†
ST156	SC	NPN	17				10	150	20†		300†
ST157	SC	NPN	17				10	150	20†		300†
ST160	SC	NPN	17								
ST161	NEC	NPN	5				6	1		10	
ST161	SC	NPN	17								
ST162	SC	NPN	17								
ST162	NEC	NPN	5				6	1		10	
ST163	SC	NPN	17								
ST171	NEC	NPN	5				6	1		15	
ST172	NEC	NPN	5				6	1		15	
ST180	SC	NPN	17				10	50	20†		60†
ST181	SC	NPN	17				10	50	40†		120†
ST182	SC	NPN	17				10	50	100†		300†
ST185	SC	NPN	17				10	50	20†		60†
ST186	SC	NPN	17				10	50	40†		120†
ST187	SC	NPN	17				10	50	100†		300†
ST251	SC	NPN	17								
ST300	NEC	PNP	5				6	1	10	20	30
ST301	NEC	PNP	5				6	1	30	40	50
ST302	NEC	PNP	5				6	1	50	65	80
ST303	NEC	PNP	5				6	1	80	130	
ST400	TT	NPN	34								
ST401	TT	NPN	34								
ST402	TT	NPN	34								
ST403	TT	NPN	34				12	2A		6	
ST410	TT	NPN	73								
ST411	TT	NPN	73								
ST415	TT	NPN	35				15	1A	12†	23†	60†
ST440	TT	NPN	75				15	1A	10†	25†	
ST450	TT	NPN	35				15	1A	10†	25†	
ST606	PCL	NPN	16								
ST610	PCL	NPN	16				4	3A	10†		50†
ST615	PCL	NPN	16				4	3A	10†		50†
ST721	GEC	NPN	13				6	1		15	
ST722	GEC	NPN	13				6	1		30	
ST723	GEC	NPN	13				6	1		50	
ST754	TT	NPN	13				10	1		40	
ST755	TT	NPN	13				10	1		40	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	6A	80.0W†		ST66
			15		360		ST70
			15		300		ST71
			15		300		ST72
			15	200	360		ST80
			15		300		ST95A
			15		600		ST150
			30		600		ST151
					600		ST152
					600		ST153
					600		ST154
					600		ST155
					600		ST156
					600		ST157
			20		600		ST160
			20	7	30		ST161
			20		600		ST161
			20		600		ST162
			20	7	30		ST162
			20		600		ST163
			20	7	30		ST171
			20	7	30		ST172
					600		ST180
					600		ST181
					600		ST182
					600		ST185
					600		ST186
					600		ST187
			30		360		ST251
6	1	15	20	8	50		ST300
6	1	15	20	8	50		ST301
6	1	15	20	8	50		ST302
6	1	15	20	8	50		ST303
			60		85		ST400
			45		85		ST401
			60		50		ST402
			45		50		ST403
			60				ST410
			45				ST411
			80		45.0W†		ST415
			60		60.0W†		ST440
			60		60.0W†		ST450
				6A			ST606
			55	6A	80.0W†		ST610
			70	6A	80.0W†		ST615
			45	25	250		ST721
			45	25	250		ST722
			45	25	250		ST723
			60		300		ST754
			80		300		ST755

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
ST903	TT	NPN	5				5	1	9	16	20
ST904	TT	NPN	5				5	1	18	31	40
ST904A	TT	NPN	5				5	1	18	60	90
ST905	TT	NPN	5				5	1	36	65	90
ST910	TT	NPN	5				5	1	76	140	333
ST1026	TT	NPN	13				3	0.1		70†	
ST1050	TT	NPN	13				3	0.3		75†	
ST1051	TT	NPN	13				3	0.3		75†	
ST1242	TT	NPN	17	20		100 μ A	5	1	15		45
ST1504	TT	NPN	13				10	1		45	
ST1505	TT	NPN	13				10	1		45	
ST1506	TT	NPN	13				10	1		20†	
ST1523	TT	NPN	13				5	1	20	35	45
ST1524	WT	NPN	13				5	1	40	70	90
ST1525	TT	NPN	13				5	1	80	140	330
ST1527	TT	NPN	13				5	1	20	40	
ST1528	TT	NPN	17								
ST1543	TT	NPN	17				3	0.1		60†	
ST3020	TT	NPN	13								
ST3030	TT	NPN	13								
ST3031	TT	NPN	13				6	1	40	60	
ST3042	TT										
ST3043	TT										
ST4044	TT	NPN	13				6	500		40†	85†
ST4045	TT	NPN	13				6	500		40†	85†
ST4150	TT	NPN	13				6	500	15†	25†	
ST4201	TT	NPN	13				6	200	12†		36†
ST4202	TT	NPN	13				6	200	12†		36†
ST4203	TT	NPN	13				6	200	30†		90†
ST4204	TT	NPN	13				6	200	30†		90†
ST5060	TT	NPN	13				10	5	9		36
ST5061	TT	NPN	13				10	5	9		36
ST6008	TT	NPN	13				6	10	20†	40†	
ST6010	TT	NPN	13				6	10	20†	40†	
ST6511	TT	NPN	17								
ST6512	TT	NPN	17								
ST7120	TT	NPN	34				12	2A	20†		
ST7210	TT	NPN	34								
STC389	SIL	NPN									
STC1001	SIL	NPN									
STC1015	SIL	NPN	67				4	2A	10		
STC1015A	SIL	NPN	67				4	2A	10		
STC1015B	SIL	NPN	67				4	2A	10		
STC1015C	SIL	NPN	67				4	2A	10		
STC1015D	SIL	NPN	67				4	2A	10		
STC1015E	SIL	NPN	67				4	2A	10		
STC1016	SIL	NPN	67				4	5A	10†		
STC1016A	SIL	NPN	67				4	5A	10†		
STC1016B	SIL	NPN	67				4	5A	10†		
STC1016C	SIL	NPN	67				4	5A	10†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	1	25			150		ST903
5	1	25			150		ST904
5	1	25			150		ST904A
5	1	25	30		150		ST905
5	1	20			150		ST910
			6	5	30		ST1026
3	50μA	6	6		30		ST1050
3	50μA	6	6		30		ST1051
5	1	20	20	25	150		ST1242
			60		300		ST1504
			80		300		ST1505
					300		ST1506
			45	50	300		ST1523
			45	50	300		ST1524
			45	50	300		ST1525
			45	50	300		ST1527
			45	50	300		ST1528
3	50μA	6	6	5	30		ST1543
			15		100		ST3020
			20		150		ST3030
					50		ST3031
					50		ST3042
					50		ST3043
			60		600		ST4044
			60		600		ST4045
				60	5.0W		ST4150
			45		600		ST4201
			75		600		ST4202
			45		600		ST4203
			75		600		ST4204
			40		600		ST5060
			70		600		ST5061
			15		500		ST6008
			30		500		ST6010
					600		ST6511
			35	3A	600		ST6512
					30.0W†		ST7120
			60		5.0W†		ST7210
							STC389
							STC1001
			30	7.5A	150.0W†		STC1015
			60	7.5A	150.0W†		STC1015A
			100	7.5A	150.0W†		STC1015B
			150	7.5A	150.0W†		STC1015C
			200	7.5A	150.0W†		STC1015D
			250	7.5A	150.0W†		STC1015E
			30	7.5A	150.0W†		STC1016
			60	7.5A	150.0W†		STC1016A
			100	7.5A	150.0W†		STC1016B
			150	7.5A	150.0W†		ST1016C

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
STC1016D	SIL	NPN	35				4	5A	10†		
STC1016E	SIL	NPN	35				4	5A	10†		
STC1035	SIL	NPN	16				4	2A	10†		
STC1035A	SIL	NPN	16				4	2A	10†		
STC1043A	SIL	NPN									
STC1077	SIL	NPN	16	30		1mA	4	1.5A	15†		83†
STC1080	SIL	NPN	16				3	1A	12†		36†
STC1081	SIL	NPN	16				3	1A	12†		36†
STC1082	SIL	NPN	16				3	1A	12†		36†
STC1083	SIL	NPN	16				3	2A	10†		30†
STC1084	SIL	NPN	16				3	2A	10†		30†
STC1085	SIL	NPN	16				3	2A	10†		40†
STC1102	SIL	NPN					4	1.5A	10†		50†
STC1103	SIL	NPN					4	1.5A	25†		75†
STC1104	SIL	NPN					4	1.5A	25†		75†
STC1300	SIL	NPN	70				4	300	20†		80†
STC1311	SIL	NPN	68	30		15 μ A	10	500	12†		36†
STC1477	SIL	NPN	67				4	1.5A	18†		75†
STC1479	SIL	NPN					4	2A	10†		
STC1480	SIL	NPN					4	5A	10†		
STC1550	SIL	NPN	35				3	1A	12†		36†
STC1550/I	SIL	NPN	35				3	1A	12†		36†
STC1551	SIL	NPN	35				3	1A	12†		36†
STC1551/I	SIL	NPN	35				3	1A	12†		36†
STC1552	SIL	NPN	35				3	1A	12†		36†
STC1552/I	SIL	NPN	35				3	1A	12†		36†
STC1553	SIL	NPN	35				3	2A	10†		30†
STC1553/I	SIL	NPN	35				3	2A	10†		30†
STC1554	SIL	NPN	35				3	2A	10†		30†
STC1554/I	SIL	NPN	35				3	2A	10†		30†
STC1555	SIL	NPN	35				3	2A	10†		30†
STC1555/I	SIL	NPN	35				3	2A	10†		30†
STC1726	SIL	NPN	35				3	10A	20†		80†
STC1728	SIL	NPN	35				3	20A	10†		40†
STC1731	SIL	NPN	35				3	10A	20†		80†
STC1733	SIL	NPN	35				3	20A	10†		40†
STC1736	SIL	NPN	35				3	10A	20†		80†
STC1738	SIL	NPN	35				3	20A	10†		40†
STC1800	SIL	NPN	42				4	300	20†		80†
STC1850	SIL	NPN	57				4	1A	15†		60†
STC2103	SIL	NPN	35				6	45A	10†		
STC2104	SIL	NPN	35				6	35A	20†		
STC2105	SIL	NPN	35				6	45A	10†		
STC2106	SIL	NPN	35				6	40A	10†		
STC2107	SIL	NPN	35				6	40A	10†		
STC2108	SIL	NPN	35				6	40A	10†		
STC2220	SIL	NPN	16				3	10A	10†		50†
STC2221	SIL	NPN	16				3	10A	10†		50†
STC2222	SIL	NPN	16				3	10A	10†		50†
STC2223	SIL	NPN	16				3	10A	10†		50†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			200	7.5A	150.0W†		STC1016D
			250	7.5A	150.0W†		STC1016E
			30	7.5A	60.0W†		STC1035
			60	7.5A	60.0W†		STC1035A
							STC1043A
			40	6A	75.0W†		STC1077
			40	3A	75.0W†		STC1080
			60	3A	75.0W†		STC1081
			80	3A	75.0W†		STC1082
			40	5A	75.0W†		STC1083
			60	5A	75.0W†		STC1084
			80	5A	75.0W†		STC1085
			55	6A			STC1102
			40	6A			STC1103
							STC1104
			40	1.5A	40.0W†		STC1300
			60		1.0W†		STC1311
			60	6A	150.0W†		STC1477
			200	7.5A	150.0W†		STC1479
			200	7.5A	150.0W†		STC1480
			40	3A	85.0W†		STC1550
			40	3A	85.0W†		STC1550/I
			60	3A	85.0W†		STC1551
			60	3A	85.0W†		STC1551/I
			80	3A	85.0W†		STC1552
			80	3A	85.0W†		STC1552/I
			40	5A	85.0W†		STC1553
			40	5A	85.0W†		STC1553/I
			60	5A	85.0W†		STC1554
			60	5A	85.0W†		STC1554/I
			80	5A	85.0W†		STC1555
			80	5A	85.0W†		STC1555/I
			80	20A	200.0W†		STC1726
			80	30A	200.0W†		STC1728
			100	20A	200.0W†		STC1731
			100	30A	200.0W†		STC1733
			150	20A	200.0W†		STC1736
			150	30A	200.0W†		STC1738
			40	2.5A	17.5W		STC1800
			60	3A	17.5W†		STC1850
			80	65A	300.0W†		STC2103
			100	65A	300.0W†		STC2104
			150	65A	300.0W†		STC2105
			80	60A	300.0W†		STC2106
			100	60A	300.0W†		STC2107
			150	60A	300.0W†		STC2108
			80	20A	200.0W†		STC2220
			100	20A	200.0W†		STC2221
			150	20A	200.0W†		STC2222
			200	20A	200.0W†		STC2223

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
STC2224	SIL	NPN	16				3	15A	10†		50†
STC2225	SIL	NPN	16				3	15A	10†		50†
STC2226	SIL	NPN	16				3	15A	10†		50†
STC2227	SIL	NPN	16				3	15A	10†		50†
STC2228	SIL	NPN	16				3	20A	10†		40†
STC2229	SIL	NPN	16				3	20A	10†		40†
STC2230	SIL	NPN	16				3	20A	10†		40†
STC2231	SIL	NPN	16				3	20A	10†		40†
STC3706	SIL	NPN	16				3	20A	10†		40†
STC5109	SIL	PNP	34				2	3A	20†		60†
STC5109/I	SIL	PNP	34				2	3A	20†		60†
STC5110	SIL	PNP	34				2	3A	20†		60†
STC5110/I	SIL	PNP	34				2	3A	20†		60†
STC5111	SIL	PNP	34				2	3A	20†		60†
STC5111/I	SIL	PNP	34				2	3A	20†		60†
STC5112	SIL	PNP	34				2	2A	20†		60†
STC5112/I	SIL	PNP	34				2	2A	20†		60†
STC5113	SIL	PNP	34				2	2A	20†		60†
STC5113/I	SIL	PNP	34				2	2A	20†		60†
STC5114	SIL	PNP	34				2	2A	20†		60†
STC5114/I	SIL	PNP	34				2	2A	20†		60†
STC5202	SIL	PNP	17				2	1A	20†		60†
STC5203	SIL	PNP	17				2	1A	20†		60†
STC5204	SIL	PNP	17				2	1A	20†		60†
STC5205	SIL	PNP	17				2	500	20†		60†
STC5205	SIL	PNP	17				2	500	20†		60†
STC5206	SIL	PNP	17				2	500	20†		60†
STC5207	SIL	PNP	17				2	500	20†		60†
STC5519	SIL	PNP	35				2	3A	20†		60†
STC5519/I	SIL	PNP	35				2	3A	20†		60†
STC5520	SIL	PNP	35				2	3A	20†		60†
STC5520/I	SIL	PNP	35				2	3A	20†		60†
STC5521	SIL	PNP	35				2	3A	20†		60†
STC5521/I	SIL	PNP	35				2	3A	20†		60†
STC5522	SIL	PNP	35				2	2A	20†		60†
STC5522/I	SIL	PNP	35				2	2A	20†		60†
STC5523	SIL	PNP	35				2	2A	20†		60†
STC5523/I	SIL	PNP	35				2	2A	20†		60†
STC5524	SIL	PNP	35				2	2A	20†		60†
STC5524/I	SIL	PNP	35				2	2A	20†		60†
STC5610	SIL	PNP	17				4	150	20†		60†
STC5610/P	SIL	PNP	17				4	150	20†		60†
STC5610/S	SIL	PNP	73				4	150	20†		60†
STC5611	SIL	PNP	17				4	150	20†		60†
STC5611/P	SIL	PNP	17				4	150	20†		60†
STC5611/S	SIL	PNP	73				4	150	20†		60†
STC5612	SIL	PNP	17				4	150	20†		60†
STC5612/P	SIL	PNP	17				4	150	20†		60†
STC5612/S	SIL	PNP	73				4	150	20†		60†
STC5624	SIL	PNP	17				15	50	12†		36†
STC5624/P	SIL	PNP	17				15	50	12†		36†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			80	20A	200.0W†		STC2224
			100	25A	200.0W†		STC2225
			150	25A	200.0W†		STC2226
			200	25A	200.0W†		STC2227
			80	30A	200.0W†		STC2228
			100	30A	200.0W†		STC2229
			150	30A	200.0W†		STC2230
			200	30A	200.0W†		STC2231
			200	30A	200.0W†		STC3706
			40		85.0W†		STC5109
			40		85.0W†		STC5109/I
			60		85.0W†		STC5110
			60		85.0W†		STC5110/I
			80		85.0W†		STC5111
			80		85.0W†		STC5111/I
			40		85.0W†		STC5112
			40		85.0W†		STC5112/I
			60		85.0W†		STC5113
			60		85.0W†		STC5113/I
			80		85.0W†		STC5114
			80		85.0W†		STC5114/I
			40	3A	25.0W†		STC5202
			60	3A	25.0W†		STC5203
			80	3A	25.0W†		STC5204
			40	2A	25.0W†		STC5205
			60	2A	25.0W†		STC5206
			80	2A	25.0W†		STC5207
			40		85.0W†		STC5519
			40		85.0W†		STC5519/I
			60		85.0W†		STC5520
			60		85.0W†		STC5520/I
			80		85.0W†		STC5521
			80		85.0W†		STC5521/I
			80		85.0W†		STC5522
			40		85.0W†		STC5522/I
			40		85.0W†		STC5523
			60		85.0W†		STC5523/I
			100		85.0W†		STC5524
			100		85.0W†		STC5524/I
			40	1A	8.7W†		STC5610
			40	1A	8.7W†		STC5610/P
			40	1A	8.7W†		STC5610/S
			60	1A	8.7W†		STC5611
			60	1A	8.7W†		STC5611/P
			60	1A	8.7W†		STC5611/S
			100	1A	8.7W†		STC5612
			100	1A	8.7W†		STC5612/P
			100	1A	8.7W†		STC5612/S
			120	1A	8.7W†		STC5624
			120	1A	8.7W†		STC5624/P

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
STC5624/S	SIL	PNP	75				15	50	12†		36†
STC5802	SIL	PNP	57				2	1A	20†		60†
STC5803	SIL	PNP	57				2	1A	20†		60†
STC5804	SIL	PNP	57				2	1A	20†		60†
STC5805	SIL	PNP	57				2	500	20†		60†
STC5806	SIL	PNP	57				2	500	20†		60†
STC5807	SIL	PNP	57				2	500	20†		60†
STC7644	SIL	NPN	17				3	1A	20†		60†
STC7644/P	SIL	NPN	17				3	1A	20†		60†
STC7644/S	SIL	NPN	17				3	1A	20†		60†
STC7645	SIL	NPN	17				4	1A	15†		60†
STC7645/P	SIL	NPN	17				4	1A	15†		60†
STC7645/S	SIL	NPN	17				4	1A	15†		60†
STX05/1510	AEI	NPN		15	1 μ A		6	10	10†		30†
STX05/1525	AEI	NPN		15	1 μ A		6	10	25†		80†
STX05/3010	AEI	NPN		30	1 μ A		6	10	10†		30†
STX05/3025	AEI	NPN		30	1 μ A		6	10	25†		70†
STX05/5010	AEI	NPN		50	1 μ A		6	10	10†		30†
STX05/5025	AEI	NPN		50	1 μ A		6	10	25†		60†
STX5/3010	AEI	NPN					6	10	10†		30†
STX5/3025	AEI	NPN					6	10	25†		70†
STX5/5010	AEI	NPN					6	10	10†		30†
STX5/5025	AEI	NPN					6	10	25†		60†
STX5/7010	AEI	NPN									
STX5/7025	AEI	NPN									
SX2010	TT										
SYL1279	SYL	NPN	5				1.5	35	75†	100†	150†
SYL1310	SYL	NPN	13				6	1	5		15
SYL1311	SYL	NPN	13				6	1	5	8	15
SYL1312	SYL	NPN	13				6	1	10	20	30
SYL1313	SYL	NPN	13				6	1	3.5	5	15
SYL1326	SYL	NPN	13				0.3	200	20†		
SYL1327	SYL	NPN	13				1	50	40†		
SYL1329	SYL	NPN	5				1.5	30	75†		150†
SYL1380	SYL	NPN	13								
SYL1430	SYL	PNP	5				6	1	70	100	300
SYL1454	SYL	PNP	13				0.2	20	40†		180†
SYL1468	SYL	NPN	13				0.75	200	60†		
SYL1475	SYL	PNP	9				15	2	30		165
SYL1509	SYL	PNP	9				9	1	20	60	175
SYL1524	SYL	NPN	5				6	3	40†		120†
SYL1536	SYL	PNP	13				6	1	4	7.5	15
SYL1537	SYL	PNP	13				6	1	5		15
SYL1538	SYL	NPN	13				6	1	50		150
SYL1539	SYL	NPN	13				6	1	30		150
SYL1547	SYL	NPN	5				1.5	35	50†	75†	100†
SYL1549	SYL	PNP	5				1.5	35	50†	75†	100†
SYL1583	SYL	PNP	5								
SYL1591	SYL	NPN	13				0.4		25		
SYL1592	SYL	PNP	13				0.4		25†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			120	1A	8.7W†		STC5624/S
			40	3A	17.5W†		STC5802
			60	3A	17.5W†		STC5803
			80	3A	17.5W†		STC5804
			40	2A	17.5W†		STC5805
			60	2A	17.5W†		STC5806
			100	2A	17.5W†		STC5807
			150	3A	8.7W†		STC7644
			150	3A	8.7W†		STC7644/P
			150	3A	8.7W†		STC7644/S
			180	3A	8.7W†		STC7645
			180	3A	8.7W†		STC7645/P
			180	3A	8.7W†		STC7645/S
			15	50	250		STX05/1510
			15	50	250		STX05/1525
			30	50	250		STX05/3010
			30	50	250		STX05/30225
			50	50	250		STX05/5010
			50	50	250		STX05/5025
			30	5A	40.0W†		STX5/3010
			30	5A	40.0W†		STX5/3025
			50	5A	40.0W†		STX5/5010
			50	5A	40.0W†		STX5/5025
			70	5A	40.0W†		STX5/7010
			70	5A	40.0W†		STX5/7025
			25	100	180		SYL2010
			25	100	180		SYL1279
			18	50	50		SYL1310
			18		50		SYL1311
							SYL1312
			18	50	50		SYL1313
			20	200	80		SYL1326
			15	200	150		SYL1327
			15	100	180		SYL1329
			20	150	150		SYL1380
			25	100	150		SYL1430
			15	200	120		SYL1454
			15	200	150		SYL1468
				10	80		SYL1475
				10	80		SYL1509
			15		50		SYL1524
			18	50	50		SYL1536
			12	100	100		SYL1537
			12	100	100		SYL1538
			12	100	100		SYL1539
			15	100	180		SYL1547
			15	100	180		SYL1549
			10	100			SYL1583
					150		SYL1591
			15	200	100		SYL1592

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
SYL1604	SYL	PNP	5				1.5				
SYL1608	SYL	PNP	5				6	1	6		15
SYL1617	SYL	NPN	13				0.5		20†		200†
SYL1621	SYL	PNP	5				6	1	40		
SYL1655	SYL	PNP	17								
SYL1684	SYL	PNP	3				1.5		20†		80†
SYL1690	SYL	PNP	13				0.2	20	40†		180†
SYL1697	SYL	PNP	13				0.3	1	30†		
SYL1717	SYL	PNP	13				0.25	400	40†		160†
SYL1750	SYL	NPN	13				6	1	15		125
SYL1986	SYL	PNP	17								
SYL1987	SYL	NPN	17				750mV	100		60†	
SYL2120	SYL	PNP	17				300mV	10	25†		
SYL2189	SYL	PNP	17				500mV	10	20†		
SYL2245	SYL	NPN	13				0.75	100		40†	
SYL2246	SYL	NPN	13				0.75	100		40†	
SYL2248	SYL	PNP	13				0.35	200		30†	
SYL2249	SYL	PNP	13				60	0.1		60	
SYL2250	SYL	PNP	13				0.35	10		40†	
SYL2300	SYL	PNP	17				0.22	10	25†		
SYL2301	SYL	PNP	17				0.25	10	20†		
SYL2493	SYL	NPN	17				1	10		50	
SYL2494	SYL	NPN	17				1	10	25		
SYL4443	SYL	NPN	17								
T0003	PCO	PNP	10				5	1	35	100	150
T0004	PCO	PNP	10				5	1	35	100	150
T0005	PCO	PNP	10				5	1	25	100	150
T0012	PCC	PNP	10				1	30	100†	150†	
T0014	PCO	PNP	10				4.5	1	35	100	200
T0015	PCO	PNP	10				4.5	1	35	100	200
T0031	PCO	PNP	10				5	1	35	100	
T0033	PCO	PNP	10				5	1	35	100	200
T204	PCO	PNP	13				6	1	25		
T1000	PCO	PNP	13				4.5	2	45		85
T1001	PCO	PNP	13				4.5	2	70		120
T1013	PCO	PNP	10				4.5	2	70	110	150
T1025	SC	PNP	10				6	1	18		
T1028	PCO	PNP	10				3	0.5	19	35	
T1032	PCO	PNP	10				3	0.5	10	35	
T1034	PCO	PNP(SB)	10				3	0.5	9	20	39
T1038	PCO	PNP(SB)	10				3	0.5	16	30	
T1040	PCO	PNP	15					1A	30		
T1041	PCC	PNP							40		150
T1042	PCO	PNP	10				0.6	100	35†	60†	105†
T1043	PCO	PNP	10				0.6	100	35†	60†	105†
T1046	PCO	PNP	10				0.6	100	60†	90†	120†
T1056	PCO	PNP	10				0.6	100	60†	90†	120†
T1159	SC	PNP									
T1166	SC	PNP	10				3	1	40	155	
T1167	PCO	PNP	66				2	200		135†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			25	100	180		SYL1604
			12	50	100		SYL1608
			10		150		SYL1617
			18	50	150		SYL1621
			15	400			SYL1655
			20		120		SYL1684
			15	200	120		SYL1690
			18	100	120		SYL1697
			24	200	120		SYL1717
			25	100	150		SYL1750
				100	100		SYL1986
				200	100		SYL1987
			15	50	100		SYL2120
			12	50	150		SYL2189
			20	100	100		SYL2245
			20	100	100		SYL2246
			20	100	100		SYL2248
			15	100	100		SYL2249
				100	100		SYL2250
				50	150		SYL2300
				50	150		SYL2301
				200	300		SYL2493
							SYL2494
			45	2A	800		SYL4443
2.5	0.5	5	12	20	50		T0003
							T0004
2.5	0.5	2	12	20	50		T0005
2.5	0.5	5*	12	20	50		T0012
			20	30	50		T0014
3	0.5	0	20	20	50		T0015
3	0.5	2	20	20	50		T0031
							T0033
3	0.5	5	50	25	25		T204
			20	20	50		T1000
				150	250		T1001
				60	100		T1013
			18	150	250		T1025
			25	50	150		T1028
3	0.5	10	4.5	5	25		T1032
			5	5	20		T1034
			4.5	3	9		T1038
3	0.5	12	6	15	25		T1040
			40	2A	25.0W†		T1041
			40	2A	25.0W†		T1042
			30	150	250		T1043
			30	150	250		T1046
			25	150	250		T1056
			10	50	150		T1159
			6	50	50		T1166
			60	3A	12.5W†		T1167

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
T1168	PCO	PNP	66				2	100		152†	
T1224	PCO	PNP(SB)	10				3	0.5	11	22	33
T1225	PCO	PNP	10				3	0.5	25	35	110
T1250	PCO	PNP	13								
T1251	PCO	PNP	13				0.5	10	20†		
T1275	PCO SC	PNP	13				6	1	9	18	
T1276	PCO	PNP	13				6	1	9	18	
T1312	PCO	PNP	13				0.5	20	20†	35†	
T1314	PCO	PNP	17				12	1		16	
T1322	PCO	PNP	13				10	3	9	65	
T1326	PCO	PNP	13				1	100	70†	125†	255†
T1327	PCO	PNP	10				3	1	35		
T1328	PCO	PNP	10				3	1	35		
T1334	PCO	PNP	13				1	100	40†	70†	120†
T1342	PCO	PNP	13				10	2	9	65	
T1343	PCO	PNP	13				6	1	9	15	
T1344	PCO	PNP	13				0.25	5	18†		
T1346	PCO	PNP	13				1	100	100†	175†	300†
T1347	PCO	PNP	13				1.5	1A	40†	100†	250†
T1381	PCO	NPN	13				10	1.5	7†		
T1382	PCO	NPN	13				10	1.5	7†		
T1383	PCO	PNP	13				1	20		25	
T1392	PCO	PNP	13				6	10	40		
T1393	PCO	PNP	13				1.5	1A	40†	100†	250†
T1395	PCO	PNP	13				1	100	70†	125†	225†
T1396	PCO	PNP	13				6	10	40	100	
T1397	PCO	PNP	13				1.5	500	50†	75†	100†
T1398	PCO	PNP	13				1	500	50†	150†	
T1431	PCO	PNP	13								
T1475	PCC	PNP	13								
T1501	PCO	PNP	13				6	1	15	25	35
T1510	PCO	PNP	13				0.5	10	20†	35†	
T1512	PCO	PNP	13				1.5	100	100†	175†	
T1537	PCO	PNP	13				1	100	40†	70†	
T1546	PCO	PNP	13				6	10		190	
T1548	PCO	PNP	10				3	0.5	19	33	
T1556	PCO	PNP	13				1.5	1A	40†	100†	250†
T1558	PCC	PNP	13				3	1		45	
T1573	PCO	PNP	13				6	10		160	
T1574	PCC	PNP	13				10	2	70	100	150
T1581	PCO	PNP	13				3	1	25		45
T1591	PCO	PNP	3				12	1		100	
T1623	PCO	PNP	13				10	2	9	15	
T1655	PCO	PNP	13				1.5	1A	40†	100†	250†
T1657	SC	PNP	13				6	1	10†		
T1667	PCO	PNP	13				6	1		60†	
T1670	PCO	NPN	13				1	20	12†	25†	60†
T1684	PCO	NPN	13				10	2	6	11	18
T1685	PCO	NPN	13				10	2		20	
T1686	PCO	NPN	13				10	2		50	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
6	1	13	80	3A	12.5W		T1168
			5	5	20		T1224
			5	5	20		T1225
			15	50	30		T1250
			30	18	30		T1251
			25	50	150		T1275
			10	50	150		T1276
			12	50	60		T1312
			25	50	30		T1314
			20	50	25		T1322
			35	400	250		T1326
			11	50	25		T1327
			14	50	25		T1328
			40	400	250		T1334
			20		60		T1342
			25	50	150		T1343
			10	50	150		T1344
			20	400	250		T1346
			40	2A	300		T1347
					100		T1381
					100		T1382
				100	150		T1383
			35	150	1.0W		T1392
			40	2A	1.0W†		T1393
			20	400	250		T1395
			35	250	300		T1396
			40	250	300		T1397
			40	150	1.0W		T1398
			25	2A	300		T1431
			25	2A	1.0W		T1475
			25	50	150		T1501
			12	50	25		T1510
			20	400	500†		T1512
			40	400	750		T1537
				250	150		T1546
3	0.5	10	45	5	25		T1548
							T1556
				50	120		T1558
			25	250	150		T1573
			18	150	150		T1574
				50	120		T1581
				10	80		T1591
			30				T1623
			75	2A	300		T1655
				50	60		T1657
			25		30		T1657
			15	100	150		T1670
			15	100	100		T1684
			15	100	100		T1685
			15	100	100		T1686

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
T1687	PCC	NPN	13				10	2	6	11	18
T1688	PCO	NPN	13				10	2	11	20	36
T1689	PCC	NPN	13				10	2	28	50	90
T1690	SC PCO	PNP	13				6	1	20		80
T1691	SC CL	PNP	13				6	1	20		200
T1692	SC	PNP	13				6	1	20		100
T1693	SC	PNP	13								
T1694	SC	PNP	13				10	2	10†		
T1695	SC	PNP	13								
T1696	SC	PNP	13								
T1737	SC PCO	PNP	13				6	1	50	70	150
T1738	PCO	PNP	13				6	1	30	45	150
T1740	PCO	PNP					0.25	10		25†	
T1756	PCO	PNP	10				4.5	2	70	140	150
T1788	PCC	PNP(SB)	10				3	0.5	16	30	
T1789	PCO	PNP	13				0.5	10	20†		
T1796	PCO	PNP	13				0.5	200		45†	
T1806	PCO	PNP	13				3	50	6		
T1807	PCO	PNP	13				1.5	400	15†	35†	
T1808	PCO	PNP	13				1.5	400		35†	
T1814	SC	PNP	13				6	1	10†		
T1822	PCO	NPN	13				5	10	20†	35†	
T1831	PCO	PNP	13				6	1	30	45	150
T1832	SC	PNP	13				10	2	10†		
T1833	SC	PNP	13				10	2	10†		
T1850	PCO	PNP	10				1	50		75†	
T1851	SC	PNP	13				6	1	50		300
T1858	SC	PNP	13				10	2	10†		
T1859	SC	PNP	17				2	1		300†	
T1871	PCO	NPN	13				1	20		50†	
T1885	PCO	NPN	13				10	2		35	
T1886	PCO	NPN	13				10	2		20	
T1887	PCO	NPN	13				10	2		50	
T1888	PCO	NPN	13				10	2		11	
T1889	PCC	NPN	13				10	2		20	
T1890	PCO	NPN	13				10	2		50	
T1891	PCO	NPN	13				1	20		25†	
T1892	PCO	NPN	13				5	10		35	
T1893	PCO	NPN	13				1	20		50†	
T1895	PCO	PNP	13				10	3		50	
T1902	PCO	PNP	13				0.35	200	15†		60†
T1903	PCO	PNP	13				0.25	20	40†		
T1904	PCO	PNP	13			1mA	0.25				
T1930	PCO	PNP	13				0.2	2	25†	40†	
T1937	PCO	PNP	13				0.5	10		90†	
T1947	PCO	PNP	13				0.5	50	20†	50†	
T1961	PCO	PNP	13				0.5	40		50†	
T1967	PCO	PNP	13				0.5	20		55†	
T1973	PCO	PNP	13				0.25	10		35†	
T1992	PCO	PNP	13				0.5	5		35†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			15	100	100		T1687
			15	100	100		T1688
			15	100	100		T1689
			20	50	30		T1690
			20	50	30		T1691
			20	50	30		T1692
			15		30		T1693
			15		30		T1694
			15		30		T1695
			15		30		T1696
			25	50	30		T1737
			25	50	60		T1738
				50	25		T1740
			18	15	250		T1756
			20	100	50		T1788
			30	18	30		T1789
				200	150		T1796
					60		T1806
			20	500	200		T1807
			20	500	200		T1808
			25		30		T1814
			25	100	100		T1822
				50	60		T1831
			15		60		T1832
			15		60		T1833
					25		T1850
			12	50	30		T1851
			20		60		T1858
			15		60		T1859
				100	150		T1871
				100	150		T1885
				100	150		T1886
				100	150		T1887
				100	150		T1888
				100	150		T1889
				100	150		T1890
				100	150		T1891
				100	150		T1892
				100	150		T1893
				100	75		T1895
			20	200	150		T1902
6	0	20*	24	100	120		T1903
			12	400	150		T1904
					35		T1930
					60		T1937
			12	50	50		T1947
				100	50		T1961
				100	35		T1967
				50	60		T1973
				50	60		T1992

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
T2015	PC0	PNP	13				6	1		60†	
T2016	PC0	PNP	13				6	1		60†	
T2017	PC0	PNP	13				6	1		60†	
T2018	PC0	PNP	13				10	2		33†	
T2019	PC0	PNP	13				6	1		45†	
T2020	PC0	PNP	13				6	1		70	
T2021	PC0	PNP	13				12	1		50	
T2022	PC0	PNP	13				12	1		60	
T2023	PC0	PNP	13				0.5	30	20†	60†	
T2024	PC0	PNP	13				6	1	25		
T2025	PC0	PNP	13				12	1	25		
T2026	PC0	PNP	13				12	1	10		
T2028	PC0	PNP	9				10	2	10†	33†	
T2050	PC0	PNP	17				6	1			120
T2057	PC0	PNP	13				0.5	5		20†	
T2058	PC0	PNP	13				0.5	5		35†	
T2059	PC0	PNP	13				0.5	5		35†	
T2060	PC0	PNP	13				0.5	5		20†	
T2061	PC0	PNP	13				0.5	5		35†	
T2062	PC0	PNP	13				0.5	5		35†	
T2066	PC0	PNP	13				6	1	6		17
T2067	PC0	PNP	13				6	1	25		150
T2068	PC0	PNP	13				6	1	13		35
T2071	PC0	PNP	13				0.5	5		75†	
T2110	PC0	PNP	13				1	100	70†	125†	225†
T2119	PC0	PNP	13				0.25	10		35†	
T2159	PC0	PNP	13				1	100	100†	175†	300†
T2172	PC0	PNP	13				1	10	20†		150†
T2173	PC0	PNP	13		600		5	1		180	
T2186	PC0	PNP	13				0.5	10	50†	90†	200†
T2187	PC0	PNP	13				0.5	10	50†	90†	200†
T2198	PC0	PNP	13				1.6	150	20†	70†	
T2211	PC0	PNP	13				0.5	10	50†	125†	300†
T2299	PC0	NPN	17				1	150	40†	65†	120†
T2327	PCC	PNP	13				0.5	20	30†	80†	
T2351	PC0	PNP	60				15	2	6†		
T2352	PC0	PNP	13				10	2	20		60
T2357	PC0	PNP	17	10		nA					
T2363	PC0	PNP	13								
T2372	PC0	PNP	13				0.5	20	30†	80†	
T2452	PC0	PNP	13	10		3nA	0.5	5	10†	15†	
T2453	PC0	PNP	13	10		3nA	0.5	5	10†	15†	
T2454	PC0	PNP	17								
T2455	PC0	PNP	17								
T2469	PC0	PNP	13	10		3nA	0.5	5	10†	15†	
T2470	PC0	PNP	13	10		3nA	0.5	5	10†	15†	
T2471	PC0	PNP	13								
T2478	PC0	NPN	13				1	10	20†	35†	
T2479	PC0	NPN	13				5	1		40	
T2691	PC0	NPN	13								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
10	0.1	3*		50	45		T2015
				50	45		T2016
				50	45		T2017
				50	60		T2018
				50	60		T2019
			50	2A			T2020
				50	45		T2021
				50	60		T2022
			20	100	100		T2023
				50	60		T2024
				50	60		T2025
				50	60		T2026
					60		T2028
					150		T2050
			40	50	150		T2057
			15	50	150		T2058
			15	50	150		T2059
			15	50	150		T2060
			15	50	150		T2061
			6	50	150		T2062
			10	10	25		T2066
			10	10	25		T2067
			10	10	25		T2068
			10	50	150		T2071
			35	400	500†		T2110
				50	60		T2119
			20	400	250		T2159
			15	200	150		T2172
			10	500	150		T2173
					60		T2186
					60		T2187
			80	500	600		T2198
					800		T2211
			80	500	600		T2299
			15	100	100		T2327
			20		75		T2351
			20	50	60		T2352
			20		300		T2357
			20		300		T2363
			6	50	150		T2372
			25	50	150		T2452
			10	50	150		T2453
			15	50	150		T2454
			6	50	150		T2455
			25	50	150		T2469
			10	50	150		T2470
			15	50	150		T2471
			20	100	300		T2478
			45	50	300		T2479
				500	360		T2691

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
T3005	PCO	PNP	13				1	100	75†	125†	255†
TA1575	RCA	PNP	11				1	150	35	70†	105
TA1575B	RCA	PNP	11				0.5	250	35†	55†	90†
TA1614	RCA	PNP	16				1.5	700	30	62†	
TA1620A	RCA	NPN	13				1	50	35†	70†	105†
TA1620B	RCA	NPN	13				50	35†	65†	105†	
TA1628	RCA	PNP	31				12	1.5	20	60	175
TA1650A	RCA	PNP	13				6	1	30	50	70
TA1655B	RCA	PNP	13				0.3	400	20†	30†	60†
TA1658	RCA	PNP	3				12	1	40	60	175
TA1659	RCA	PNP	2				12	1	20	60	175
TA1660	RCA	PNP	3				12	1	20	60	400
TA1662	RCA	PNP	3				12	1	20	60	175
TA1682	RCA	PNP	16					1A		65	
TA1682A	RCA	PNP	16				1.5	1A		75	
TA1693B	RCA	PNP	13								
TA1697	RCA	PNP	13				0.2	20	40†	60†	120†
TA1703B	RCA	PNP	13				0.3	400	30†	30†	
TA1704	RCA	PNP	13				0.3	20	20†	30†	60†
TA1705	RCA	NPN	13				0.3	200	20†		40†
TA1706	RCA	PNP	13				0.2	20	40†	60†	130†
TA1730	RCA	PNP	13				6	1	50	70	
TA1731	RCA	PNP	3				12	1	20	60	400
TA1755	RCA	PNP	3				12	1		60	
TA1756	RCA	PNP	3				12	1		60	
TA1757	RCA	PNP	3				12	1		60	
TA1759	RCA	NPN	13				6.2	20	20†	40†	60†
TA1763	RCA	PNP	13				0.3	10	30†	50†	
TA1763A	RCA	PNP	13				0.3	10	30†	50†	
TA1763B	RCA	PNP	13				0.5	10	30†		
TA1765	RCA	PNP	16				2	500	25†		90†
TA1766	RCA	PNP	16				2	700		45	
TA1767	RCA	NPN	13				5	1	20	30	50
TA1771	RCA	NPN	13				5	1	45		
TA1772	RCA	NPN	13				5	1		60	
TA1773	RCA	PNP	16				2	700		60	
TA1778	RCA	PNP	13				0.3	20	20†	30†	60†
TA1782	RCA	PNP	13				0.3	400	10†	15†	30†
TA1783	RCA	PNP	13				0.3	400	30†	45†	90†
TA1794	RCA	NPN	13				0.3	200	20†		40†
TA1796	RCA	PNP	13				7	5	20†	45†	
TA1797	RCA										
TA1798	RCA	PNP	13				7	5	10†	45†	
TA1827	RCA	PNP	9				10.5	1.5	20	60	175
TA1828	RCA	PNP	9		100		10.5	1.5	20	60	175
TA1829	RCA	PNP	9				10.5	1.5	20	60	175
TA1830	RCA	PNP	13					200		50	
TA1832	RCA	PNP	13								
TA1833	RCA	PNP	13								
TA1846	RCA	PNP	3				12	1		100	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
6	1	9	35	400	250		T3005
				75	150		TA1575
			45	250	250		TA1575B
			40	3A			TA1614
			25	50	100		TA1620A
			48	50	100		TA1620B
			40	10	120		TA1628
			16	200	15		TA1650A
				400	150		TA1655B
			20	10	80		TA1658
			20	10	80		TA1659
				10	80		TA1660
				10	80		TA1662
			50	5A	50.0W†		TA1682
			60	10A	50.0W†		TA1682A
			25	100	75		TA1693B
			14	100	120		TA1697
				400	120		TA1703B
			14	100	80		TA1704
			20	400	120		TA1705
4.5	0.5	6*	14	100	120		TA1706
			32	20	50		TA1730
				10	80		TA1731
				10	80		TA1755
			70	5A	25.0W†		TA1756
			80	5A	25.0W†		TA1757
			20	200	120		TA1759
			12	100	150		TA1763
			12	100	150		TA1763A
			12	100	150		TA1763B
			10	2	20		TA1765
				3A	10.0W†		TA1766
			18	500	100		TA1767
			15	500	100		TA1771
			12	500	100		TA1772
			40	3A	10.0W†		TA1773
			14	100	80		TA1778
				400	120		TA1782
			14	400	120		TA1783
			18	400	120		TA1794
			29	100	120		TA1796
			29	100	120		TA1797
			29	100	120		TA1798
							TA1827
			40	10	120		TA1828
			40	10	120		TA1829
				500	240		TA1830
			25	100	75		TA1832
			25	100	75		TA1833
				10	80		TA1846

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
TA1847	RCA	PNP	3				12	1	40		
TA1860	RCA	PNP	3				12	1		80	
TA1861	RCA	PNP	3				12	1		80	
TA1869	RCA	PNP	13								
TA1881	RCA	PNP	16				1.5	200	20†		
TA1882	RCA	NPN	13				5	1	50		200
TA1890	RCA	PNP	16				1.5	1A		130†	
TA1891	RCA	PNP	16				1.5	1A	40†		
TA1920	RCA	PNP	13				0.3	10		50†	
TA1920A	RCA	PNP	13				0.3	10		50†	
TA1920B	RCA	PNP	13				0.3	10		75†	
TA1928A	RCA	PNP	16								
TA1961	RCA	PNP	16								
TA2083	RCA	PNP	16								
TA2084	RCA	NPN	13				5	250		18†	
TA2358A	RCA	NPN	9				6	2	40		200
TA2401	RCA	NPN	13				8	5		100	
TA2458	RCA	NPN	17	300		20 μA	10	20	40†		160†
TA2470	RCA	NPN	17	200		50 μA	10	20	40†		160†
TA6055B	RCA	PNP	13				0.3	400	20†	30†	60†
TA6200	FC	NPN	13				5	1		60†	
TF49	SH	PNP	13				0.2	1	17†	30†	
TF65	SH	PNP	13				1	2	20	45	120
TF65/30-R	SH	PNP	13				1.5	1	20		30
TF65/30-0	SH	PNP	13				1.5	1	30		40
TF65/30-Y	SH	PNP	13				1.5	1	40		50
TF65/30-Gn	SH	PNP	13				1.5	1	50		60
TF65/30-B1	SH	PNP	13				1.5	1	60		75
TF65/30-V	SH	PNP	13				1.5	1	75		100
TF66	SH	PNP	13				0.5	5		50†	
TF66/30	SH	PNP	13				0.5	5		50†	
TF66/60	SH	PNP	13				6	10		150	
TF70	SH	NPN	5				5	1	7.4	10	16
TF71	SH	NPN	5				5	1	16	24	49
TF72	SH	NPN	5				5	1	49	99	
TF77	SH	PNP	30				4.5	50		23†	
TF77/30	SH	PNP	30				3	5		28	
TF78	SH	PNP	13				0.7	50	20†	30†	
TF78/30	SH	PNP	13				0.7	50	20†	30†	
TF78/60	SH	PNP	13				0.3	50	20†	30†	
TF80	SH	PNP	30				6	300		45†	
TF80/30	SH	PNP	30				1.3	50	25	50	
TF80/60	SH	PNP	30				1.3	50	26	50	
TF80/80	SH	PNP	30				1.3	50	25	50	
TF90/30	SH	PNP	13				0.5	500		75†	
TF90/60	SH	PNP	13				0.5	500		75†	
TF251	SH	NPN	30				0.5	2		50	
TF252	SH	NPN	30				0.5	2		50	
TF260	SH	NPN	13				1	10		10†	
TG32	NOR	NPN	15				4.5	1	24		199

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
10	0.3	8*		10	80		TA1847
				10	80		TA1860
				10	80		TA1861
			25	100	75		TA1869
			35		10.0W†		TA1881
			50		500		TA1882
			40	5A	50.0W†		TA1890
			60	5A	50.0W†		TA1891
				100	150		TA1920
				100	150		TA1920A
				100	150		TA1920B
				10A	5.0W		TA1928A
				10	80		TA1961
				3A	10.0W		TA2083
			140	1A	18.0W†		TA2084
			15	20	200		TA2358A
					200		TA2401
			350	1A	1.0W		TA2458
			250	1A	1.0W		TA2470
							TA6055B
2	0.5	25	40		1.0W		TA6200
			15	200	25		TF49
			16	50	25		TF65
			10	50	30		TF65/30-R
			10	50	30		TF65/30-O
			10	50	30		TF65/30-Y
			10	50	30		TF65/30-Gn
			10	50	30		TF65/30-B1
			10	50	30		TF65/30-V
			16	300	50		TF66
			32	300	50		TF66/30
			60	50	300		TF66/60
			15	10	100		TF70
			15	10	75		TF71
			15	10	50		TF72
				600	500		TF77
				600	500		TF77/30
			16	600	500		TF78
			32	600	500		TF78/30
			64	600	500		TF78/60
				2.5			TF80
			32	3A	3.0W†		TF80/30
			64	3A	3.0W†		TF80/60
			80	3A	3.0W†		TF80/80
			32	15A	7.0W†		TF90/30
			64	15A	7.0W†		TF90/60
			5	20	10		TF251
			10	20	10		TF252
			100	300	450		TF260
					150		TG32

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{CO}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
TG33	NOR	NPN	15				4.5	1	24		199
TG41	NOR	PNP	15				5	1	49		199
THP35	TH	NPN	11				5	1	9	12	19
THP36	TH	NPN	11				5	1	9	12	19
THP45	TH	PNP	77				3	500		42	
THP46	TH	PNP	77				3	500		42	
THP47	TH	PNP	77				3	500		42	
THP50	TH	PNP	77				2	500		42†	
THP51	TH	PNP	77				2	500		42†	
THP52	TH	PNP	77				2	500		42†	
THP61	TH	NPN	11								
THP62	TH	NPN	11								
THP106	TH	NPN	13				5	1	19	24	32
TI156	TII	PNP	13				2	500	25†		75†
TI156L	TII	PNP	17				2	500	25†		75†
TI158	TII	PNP	13				2	500	25†		75†
TI158A	TII	PNP	13				2	500	25†		75†
TI158AL	TII	PNP	17				2	500	25†		75†
TI158L	TII	PNP	17				2	500	25†		75†
TI159	TII	PNP	17	15		25mA	1.5	500	18		72
TI160	TII	PNP	17	20		20mA	1.5	500	18		72
TI161	TII	PNP	17	25		20mA	1.5	500	18		72
TI162	TII	PNP	17	30		20mA	1.5	500	18		72
TI363	TII	PNP	13				6	0.5	35†		
TI364	TII	PNP	13				6	0.5	20†		
TI385	TII	PNP	13				6	1	35†		
TI386	TII	NPN	13				6	1	35†		
TI387	TII	NPN	13				6	1	35†		
TI388	TII	NPN	13				6	1	35†		
TI389	TII	NPN	13				6	0.5	30		38
TI399	TII	PNP	13				6	0.5		20†	
TI400	TII	PNP	132				6	2	40		
TI401	TII	PNP	132				6	2	20		
TI402	TII	PNP	132				6	2	20		
TI403	TII	PNP	132				6	2	35		
TI407	TIL	NPN	116				10	2	20†		
TI408	TIL	NPN	116				10	2	15†		
TI409	TIL	NPN	116				10	2	15†		
TI411	TII	NPN	116								
TI412	TII TIL	NPN	116								
TI413	TII TIL	NPN	116								
TI414	TII TIL	NPN	116								
TI415	TII TIL	NPN	116				5	100 μA	100†		660†
TI416	TIL	NPN	116				5	1	45†		660†
TI417	TIL	NPN	116				5	1	90†		330†
TI418	TII TIL	NPN	116				5	1	180†		660†
TI419	TII TIL	NPN	116				5	1	90†		660†
TI424	TII	NPN	122				5	1	30		90
TI425	TII	NPN	122				5	1	50		200
TI428	TII	PNP	122				5	1	15		50

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
					150		TG33
					250		TG41
				25			THP35
5	1	17	30	25	150		THP36
			7.5	3A	12.0W†		THP45
			15	3A	12.0W†		THP46
			30	3A	12.0W†		THP47
			7.5	2.5A	5.0W†		THP50
			15	2.5A	5.0W†		THP51
			30	2.5A	5.0W†		THP52
		17		25	150		THP61
		17		25	150		THP62
5	1	17	30	25	150		THP106
			30	3A	1.0W		TI156
			30	3A	1W		TI156L
			40	3A	1W		TI158
			60	3A	1W		TI158A
			60	3A	1W		TI158AL
			40	3A	1W		TI158L
			40	3A	1.4W		TI159
			60	3A	1.4W		TI160
			80	3A	1.4W		TI161
			100	3A	1.4W		TI162
			30	50	150		TI363
			30	50	150		TI364
			30	50	150		TI385
			30	50	150		TI386
			30	50	150		TI387
			30	50	150		TI388
			30	50	150		TI389
				50	150		TI399
				50	75		TI400
				50	75		TI401
				50	75		TI402
				50	75		TI403
			12	30	200		TI407
			12	30	200		TI408
			12	30	200		TI409
			30	800	300		TI411
			30	800	300		TI412
			30	800	300		TI413
			20	800	300		TI414
5	0.1	1.9	30	30	250		TI415
5	0.1	1.9	30	30	250		TI416
5	0.1	1.9	30	30	250		TI417
5	0.1	1.9	30	30	250		TI418
5	0.1	1.9	30	30	250		TI419
10	0.3	6	50	500	450		TI424
10	0.3	5	50	500	450		TI425
			35	300	450		TI428

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
TI429	TII	PNP	122				5	1	25		100
TI432	TII	NPN	122								
TI433	TII	NPN	122								
TI450	TII	NPN	81								
TI451	TII	NPN	81								
TI480	TII	NPN	17				10	5	9		36
TI481	TII	NPN	17				10	5	9		36
TI482	TII	NPN	17								
TI483	TII	NPN	17								
TI484	TII	NPN	17								
TI485	TII	NPN	17				1	10	15†		60†
TI486	TII	NPN	17								
TI487	TII	NPN	73								
TI490	TII	NPN	17	5		5nA	5	0.5	35†	80†	140†
TI492	TII	NPN	17	10		100 μ A	5	1	15		45
TI493	TII	NPN	17	10		100 μ A	5	10	15†		45†
TI494	TII	NPN	17	20		100 μ A	5	10	40†		120†
TI495	TII	NPN	17	20		100 μ A	5	10	120†		250†
TI496	TII	NPN	17				5	3	10†		
TI539	TII	PNP	35	30		10mA	2	2A	30†		75†
TI540	TII	PNP	35	30		10mA	2	2A	45†		113†
TI602	TII	NPN	13				10	0.1	1000†		
TI1121	TII	NPN	75								
TI1122	TII	NPN	75								
TI1123	TII	NPN	75								
TI1124	TII	NPN	75								
TI1125	TII	NPN	75								
TI1126	TII	NPN	75								
TI1131	TII	NPN	35								
TI1132	TII	NPN	35								
TI1133	TII	NPN	35								
TI1134	TII	NPN	35								
TI1135	TII	NPN	35								
TI1136	TII	NPN	35								
TI1141	TII	NPN	75								
TI1142	TII	NPN	75								
TI1143	TII	NPN	75								
TI1144	TII	NPN	75								
TI1145	TII	NPN	75								
TI1146	TII	NPN	75								
TI1151	TII	NPN	35								
TI1152	TII	NPN	35								
TI1153	TII	NPN	35								
TI1154	TII	NPN	35								
TI1155	TII	NPN	35								
TI1156	TII	NPN	35								
TI3027(1)	TII	PNP	16								
TI3027(2)	TII	PNP	16								
TI3027(3)	TII	PNP	16								
TI3027(4)	TII	PNP	16								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	30μA	3	35	300	450		TI429
			40	300	450		TI432
			40	300	450		TI433
			20		450		TI450
			20		450		TI451
				60	600		TI480
				60	600		TI481
			20		600		TI482
			20		600		TI483
			20		600		TI484
			14		300		TI485
			60	750	800		TI486
			60	750	800		TI487
			45	50	300		TI490
			20	25	150		TI492
			20	20	125		TI493
			20	20	125		TI494
			20	20	125		TI495
				60	600		TI496
			60	3.5A	900		TI539
5	1	20	60	3.5A	900		TI540
			40		600		TI602
			100	7.5A	3.0W†		TI1121
			100	7.5A	3W		TI1122
			75	7.5A	3W		TI1123
			75	7.5A	3W		TI1124
			50	7.5A	3W		TI1125
			50	7.5A	3W		TI1126
			100	7.5A	3W		TI1131
			100	7.5A	3W		TI1132
			75	7.5A	3W		TI1133
			75	7.5A	3W		TI1134
			50	7.5A	3W		TI1135
			50	7.5A	3W		TI1136
			100	7.5A	3W		TI1141
			100	7.5A	3W		TI1142
			75	7.5A	3W		TI1143
			75	7.5A	3W		TI1144
			50	7.5A	3W		TI1145
			50	7.5A	3W		TI1146
			100	7.5A	3W		TI1151
			100	7.5A	3W		TI1152
			75	7.5A	3W		TI1153
			75	7.5A	3W		TI1154
			50	7.5A	3W		TI1155
			50	7.5A	3W		TI1156
			40	7A	2.0W†		TI3027(1)
			40	7A	2.0W†		TI3027(2)
			40	7A	2.0W†		TI3027(3)
			40	7A	2.0W†		TI3027(4)

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
TI3027(5)	TII	PNP	16								
TI3027(6)	TII	PNP	16								
TI3027(7)	TII	PNP	16								
TI3028(1)	TII	PNP	16								
TI3028(2)	TII	PNP	16								
TI3028(3)	TII	PNP	16								
TI3028(4)	TII	PNP	16								
TI3028(5)	TII	PNP	16								
TI3028(6)	TII	PNP	16								
TI3028(7)	TII	PNP	16								
TI3029	TII	PNP	16								
TI3029(1)	TII	PNP	16								
TI3029(2)	TII	PNP	16								
TI3029(3)	TII	PNP	16								
TI3029(4)	TII	PNP	16								
TI3029(5)	TII	PNP	16								
TI3029(6)	TII	PNP	16								
TI3029(7)	TII	PNP	16								
TI3030	TII	PNP	16								
TI3030(1)	TII	PNP	16								
TI3030(2)	TII	PNP	16								
TI3030(3)	TII	PNP	16								
TI3030(4)	TII	PNP	16								
TI3030(5)	TII	PNP	16								
TI3030(6)	TII	PNP	16								
TI3030(7)	TII	PNP	16								
TI3031	TII	PNP	16								
TI3031(1)	TII	PNP	16								
TI3031(2)	TII	PNP	16								
TI3031(3)	TII	PNP	16								
TI3031(4)	TII	PNP	16								
TI3031(5)	TII	PNP	16								
TI3031(6)	TII	PNP	16								
TI3031(7)	TII	PNP	16								
TIG05	TII	PNP	16								
TIG06	TII	PNP	16								
TIG07	TII	PNP	16								
TIG08	TII	PNP	16								
TIG09	TII	PNP	16								
TIG10	TII	PNP	16								
TIS03	TIL	PNP	116								
TIS04	TIL	PNP	116								
TIS18	TII	NPN	116								
TIS22	TII	NPN	134				5	1	60		350
TIS23	TII	NPN	134				5	1	150		600
TIS24	TII	NPN	134				5	1	150		000
TIK155	TII	NPN	75	60		5mA					
TIK210	TII	NPN	81				1	1A	20†		
TIK211	TII	NPN	81				1	1A	20†		
TIK316	TII	PNP	9				6	4	35		

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
		40	7A	2.0W							TI3027(5)
		40	7A	2.0W							TI3027(6)
		40	7A	2.0W							TI3027(7)
		50	7A	2.0W							TI3028(1)
		50	7A	2.0W							TI3028(2)
		50	7A	2.0W							TI3028(3)
		50	7A	2.0W							TI3028(4)
		50	7A	2.0W							TI3028(5)
		50	7A	2.0W							TI3028(6)
		50	7A	2.0W							TI3028(7)
		55	7A	2.0W							TI3029
		55	7A	2.0W							TI3029(1)
		55	7A	2.0W							TI3029(2)
		55	7A	2.0W							TI3029(3)
		55	7A	2.0W							TI3029(4)
		55	7A	2.0W							TI3029(5)
		55	7A	2.0W							TI3029(6)
		55	7A	2.0W							TI3029(7)
		60	7A	2.0W							TI3030
		60	7A	2.0W							TI3030(1)
		60	7A	2.0W							TI3030(2)
		60	7A	2.0W							TI3030(3)
		60	7A	2.0W							TI3030(4)
		60	7A	2.0W							TI3030(5)
		60	7A	2.0W							TI3030(6)
		60	7A	2.0W							TI3030(7)
		61	7A	2.0W							TI3031
		61	7A	2.0W							TI3031(1)
		61	7A	2.0W							TI3031(2)
		61	7A	2.0W							TI3031(3)
		61	7A	2.0W							TI3031(4)
		61	7A	2.0W							TI3031(5)
		61	7A	2.0W							TI3031(6)
		61	7A	2.0W							TI3031(7)
		35	50A	2.0W							TIG05
		45	50A	2.0W							TIG06
		55	50A	2.0W							TIG07
		35	50A	2.0W							TIG08
		45	50A	2.0W							TIG09
		55	50A	2.0W							TIG10
		25	200	300							TIS03
		30	200	300							TIS04
		13	30	200							TIS18
5	10 μ A	3	45	50	150						TIS22
5	10 μ A	3	45	50	150						TIS23
5	10 μ A	3	60	50	150						TIS24
			80	10A	3W						TIX155
			60	12A	40.0W†						TIX210
			80	12A	40.0W†						TIX211
6	4	4.5*	10	50	75						TIX316

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
TIX317	TII	PNP	17								
TIX318	TII	PNP	17								
TIX895	TII	PNP	81				1	10	20†		
TIX2000	TII	PNP	9				6	3	10†		
TIX2150	TII	NPN	126				10	500	30		
TIX3015	TII	NPN	9				6	5	20		200
TIX3016	TII	NPN	81				6	5	20†		200†
TIX3016A	TII	NPN	108				6	5	20		250
TIX3023	TII	PNP	108				5	6	40		400
TIX3024	TII	PNP	108				5	3	30		300
TIX3032	TII	PNP	9				12	6	25		250
TIX3033	TII	NPN	13				2	100	20†		
TIX3034	TII	NPN	13				2	100	40†		
TIX3035	TII	NPN	13				2	100	40†		
TIX3036	TII	NPN	13				2	100	40†		
TIXA01	TII	PNP	17				6	1	100	180	250
TIXA02	TII	PNP	17				4	0.5	120	200	300
TIXA03	TII	PNP	17				6	1	45		170
TIXA04	TII	PNP	17				6	1	100		375
TIXA05 (1)	TII	PNP	17				6	1	30		55
TIXA05 (2)	TII	PNP	17				6	1	45		85
TIXA05 (3)	TII	PNP	17				6	1	65		120
TIXA05 (4)	TII	PNP	17				6	1	100		170
TIXA05 (5)	TII	PNP	17				6	1	140		250
TIXA05 (6)	TII	PNP	17				6	1	200		375
TIXA05 (7)	TII	PNP	17				6	1	305		560
TIXM01	TII	PNP	13				10	1	20†		
TIXM02	TII	PNP	13				10	1	20†		
TIXM03	TII	PNP	13				10	1	10†		
TIXM04	TII	PNP	13				10	1	20†		
TIXM05	TII	PNP	13				10	1.5	20†		
TIXM06	TII	PNP	13				10	1.5	20†		
TIXM07	TII	PNP	13				10	1.5	20†		
TIXM08	TII	PNP	13				10	1.5	20†		
TIXM101	TII	PNP	9				5	2	30		300
TIXM201	TII	PNP	138				6	2	18†		
TIXM202	TII	PNP	138								
TIXM203	TII	PNP	138				6	2	10†		
TIXM204	TII	PNP	138								
TIXM205	TII	PNP	138								
TIXM206	TII	PNP	138								
TIXM207	TII	PNP	138				6	2	10†		
TLXP07	TII	PNP	34	50		5 μ A					
TIXS09	TII	NPN	108				6	5	20		250
TIXS10	TII	NPN	108				6	5	20		350
TIXS12	TII	NPN	139				10	50	20†		200†
TIXS13	TII	NPN	139				10	50	20†		200†
TIXS28	TII	NPN	116				10	4	30†		
TIXS29	TII	NPN	116				10	4	30†		
TIXS30	TII	NPN	116				10	4	30†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	3A	400		TIX317
			50	3A	400		TIX318
			3	75	75		TIX895
			10	25	90		TIX2000
			80	2A	40.0W†		TIX2150
			15	50	200		TIX3015
			15	50	200		TIX3016
			15	50	200		TIX3016A
			7	50	150		TIX3023
			7	50	75		TIX3024
			15	100	75		TIX3032
			60	3A	800		TIX3033
			80	3A	800		TIX3034
			60	3A	800		TIX3035
			80	3A	800		TIX3036
4	0.5	4	35	150	150		TIXA01
4	0.5	3	25	150	150		TIXA02
			20	150	150		TIXA03
			20	150	150		TIXA04
			15	150	150		TIXA05(1)
			15	150	150		TIXA05(2)
			15	150	150		TIXA05(3)
			15	150	150		TIXA05(4)
			15	150	150		TIXA05(5)
			15	150	150		TIXA05(6)
			15	150	150		TIXA05(7)
			10	30	75		TIXM01
			10	30	75		TIXM02
			10	30	75		TIXM03
			10	30	75		TIXM04
			10	30	75		TIXM05
			10	30	75		TIXM06
			10	30	75		TIXM07
			10	30	75		TIXM08
			7	50	75		TIXM101
			15	50	75		TIXM201
			15	50	75		TIXM202
			15	50	75		TIXM203
			15	50	75		TIXM204
			15	50	75		TIXM205
			15	50	75		TIXM206
			15	50	75		TIXM207
			80	7.5A	3.0W†		TIXP07
			15	50	200		TIXS09
			13	50	200		TIXS10
			15	200	1.0W		TIXS12
			15	200	1.0W		TIXS13
			40	30	200		TIXS28
			40	30	200		TIXS29
			40	30	200		TIXS30

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
TIXS31	TII	NPN	116				10	4	30†		
TJ1	STC	PNP	19				1.5	2	10	20	
TJ2	STC	PNP	19				1.5	2	30	40	
TJ3	STC	PNP	19				1.5	2	50	60	
TJN1	CSF	PNP	5								
TJN1B	CSF	PNP	5								
TJN2	CSF	PNP	5								
TJN2B	CSF	PNP	5								
TJN3	CSF	PNP									
TJN4	CSF	PNP									
TJN300/2	CSF	PNP									
TJN300/3	CSF	PNP									
TK20	STC	PNP	47				4.5	1	20	40	100
TK20B	STC	PNP	47				4.5	1	20	43	100
TK20C	STC	PNP	47				4.5	1	20	40	100
TK21	STC	PNP	47				9	1	18	22	35
TK21B	STC	PNP	47				9	1	18	25	35
TK21C	STC	PNP	47				9	1		22	
TK23	STC	PNP	47				12	1	35	50	70
TK23A	STC	PNP	47				12	1	35	50	70
TK23C	STC	PNP	47				10.5	1	35	50	70
TK24	STC	PNP	47				9	1	18	40	100
TK24B	STC	PNP	47				9	1	18	40	100
TK24C	STC	PNP	47				0.2	40	20†	35†	
TK25	STC	PNP	47				10.5	1	20	60	150
TK25B	STC	PNP	47				4.5	1	20	63	150
TK25C	STC	PNP	47				4.5	1	20	60	150
TK26	STC	PNP	47				9	1	18	22	35
TK26B	STC	PNP	47				9	1	18	22	35
TK27	STC	PNP	47				9	1	18	40	100
TK27B	STC	PNP	47				9	1	18	40	100
TK28	STC	PNP	47				0.1	3	25†	46†	
TK28B	STC	PNP	47								
TK28C	STC	PNP	47					15		51	
TK30	STC	PNP	47				4.5	1	20	40	100
TK30C	STC	PNP	47				4.5	1	20	40	85
TK30D	STC	PNP	47				200mV	100	15	35	95
TK31	STC	PNP	47				4.5	1	20	60	150
TK31C	STC	PNP	47				4.5	1	20	60	150
TK31D	STC	PNP	47				200mV	100	25	50	125
TK33	STC	NPN	47				4.5	1	20	30	100
TK33C	STC	NPN	47				4.5	1	20	40	100
TK34	STC	NPN	47				4.5	3	25	60	200
TK34C	STC	NPN	47				4.5	3	25		200
TK35	STC	PNP	47					10	25†		60†
TK35C	STC	PNP	47				0.5	10		25†	
TK36	STC	PNP	47					10	30†		80†
TK36C	STC	PNP	47				0.5	10		30†	
TK37	STC	PNP	47					10	40†		100†
TK37C	STC	PNP	47				0.5	10		40†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	30	200		TLX31
1.5	0.2	15		50	200		TJ1
1.5	0.2	25		50	200		TJ2
1.5	0.2	15		50	200		TJ3
1.5	0.5	16	25	50	50		TJN1
1.5	0.5	16	25	50	50		TJN1B
1.5	0.5	16	25	50	50		TJN2
1.5	0.5	16	25	50	50		TJN2F
					200		TJN3
					200		TJN4
				2.5A	4.0W†		TJN300/2
				2.5A	4.0W†		TJN300/3
4.5	0.5	4.5	12		200		TK20
4.5	0.5	4.5	12		200		TK20B
4.5	0.5	4.5	12		200		TK20C
4.5	0.5	8	20		200		TK21
4.5	0.5	8	20		200		TK21B
					200		TK21C
3	0.5	6	30		200		TK23
3	0.5	6	30		200		TK23A
3	0.5	6	30		200		TK23C
4.5	0.5	8	20		200		TK24
4.5	0.5	8	20		200		TK24B
			20		200		TK24C
0.2	0.3	2.5	6		200		TK25
			6		200		TK25B
			6		200		TK25C
4.5	0.5	8	20		200		TK26
4.5	0.5	14	20		200		TK26B
4.5	0.5	8	20		200		TK27
4.5	0.5	8	20		200		TK27B
			25		200		TK28
			25		200		TK28B
			25		200		TK28C
4.5	0.5	4.5	10		200		TK30
4.5	0.5	4.5	10		200		TK30C
			10		200		TK30D
0.2	0.5	2.5	5		200		TK31
			5		200		TK31C
			5		200		TK31D
4.5	0.5	5	12		100		TK33
4.5	0.5	3	12		150		TK33C
4.5	0.5	3	6		100		TK34
4.5	0.5	3	6		150		TK34C
			10		200		TK35
			10		200		TK35C
			10		200		TK36
			10		200		TK36C
			10		200		TK37
			10		200		TK37C

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
TK38	STC	PNP	47					10	60†		150†
TK38C	STC	PNP	47				0.5	10		60†	
TK40	STC	PNP	47				12	1	60	90	200
TK40A	STC	PNP	47				12	1	60	90	200
TK40C	STC	PNP	47				10.5	1	60	90	200
TK41	STC	PNP	47				12	1	20	40	55
TK41C	STC	PNP	47				10.5	1	20	40	50
TK42	STC	PNP	47				12	1	45	70	150
TK42C	STC	PNP	47				10.5	1	45	70	150
TK44C	STC	PNP	47				0.3	10		30†	
TK45	STC	PNP	47				12	1	45	66	150
TK45C	STC	PNP	47				12	1		66	
TK46	STC	PNP	47					5	15†		80†
TK46C	STC	PNP	47					5	15†		
TK47	STC	PNP	47					5	20†		
TK47C	STC	PNP	47					5	20†		
TK48C	STC	PNP	47				0.3	3		10†	
TK49	STC	NPN	47					5	15†		
TK49C	STC	NPN	47					5	15†		
TK70	STC	NPN	47				9	3	30	50	
TK70A	STC	NPN	47				9	3	30	50	
TK70C	STC	NPN	47				10.5	3	30	50	
TK71	STC	NPN	47				9	3	10	30	
TK71A	STC	NPN	47				9	3	10	30	
TK71C	STC	NPN	47				10.5	3	10	30	
TK72	STC	NPN	47				9	3	10		
TK72A	STC	NPN	47				9	3	10		
TK72C	STC	NPN	47				10.5	2	10		
TK200	STC	NPN	16				9	20	8		
TK200A	STC	NPN	16				9	20	8		
TK201	STC	NPN	16	20	0.2 μ A		9	20	20	42	68
TK201A	STC	NPN	16				9	20	20		
TK202	STC	NPN	16				9	20	10		
TK202A	STC	NPN	16				9	20	10		
TK203	STC	NPN	16				9	20	20		
TK203A	STC	NPN	16				9	20	20		
TK250	STC	NPN	13				9	20	8		
TK250A	STC	NPN	13				9	20	8		
TK251	STC	NPN	13				9	20	20	42	68
TK251A	STC	NPN	17				9	20	20		
TK252	STC	NPN	13				9	20	10		
TK252A	STC	NPN	13				9	20	10		
TK253	STC	NPN	13				9	20	20		
TK253A	STC	NPN	13				9	20	20		
TK254A	STC	NPN	13				9	10	25		
TK255A	STC	NPN	13	15		10 μ A	0.6	50	15†		60†
TK256A	STC	NPN	13				0.6	50	25†		120†
TK257A	STC	NPN	13	9		50nA	9	10	25		
TK258A	STC	NPN	13					10	20†		60†
TK259A	STC	NPN	13					10	40†		120†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			10		200		TK38
			10		200		TK38C
4.5	0.5	6	20		200		TK40
4.5	0.5	6	20		200		TK40A
4.5	0.5	6	20		200		TK40C
4.5	0.5	6	20		200		TK41
4.5	0.5	6	15		200		TK41C
4.5	0.5	6	15		200		TK42
4.5	0.5	6	15		200		TK42C
					150		TK44C
4.5	0.5	2	15		200		TK45
					200		TK45C
			10		200		TK46
			10		200		TK46C
					200		TK47
					200		TK47C
			60		150		TK48C
			10		100		TK49
			20		100		TK49C
			15		325		TK70
			15		325		TK70A
			20		325		TK70C
			25		325		TK71
			25		325		TK71A
			20		325		TK71C
			12		325		TK72
			12		325		TK72A
			12		325		TK72C
			20	500	3.0W†		TK200
			20	500	2.5W†		TK200A
			20	500	3.0W†		TK201
			20	500	2.0W†		TK201A
			20	500	2.5W†		TK202
			20	500	2.5W†		TK202A
				500	2.5W†		TK203
			20	500	2.5W†		TK203A
			20		600		TK250
			20	250	500		TK250A
2	1	6	20	250	600		TK251
			20	500	600		TK251A
			20	500	600		TK252
			20	500	600		TK252A
				500	600		TK253
			20	500	600		TK253A
			25	100	600		TK254A
			15	100	300		TK255A
			15	100	300		TK256A
			20	100	300		TK257A
			12	100	300		TK258A
			12	100	300		TK259A

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
TK264A	STC	NPN	13	9		50nA	9	10	25		
TK400	STC	PNP	16				1.5	10	7.5†		
TK400A	STC	PNP	16				1.5	1A	15†		
TK401	STC	PNP	16				15	1A	20†		
TK401A	STC	PNP	16				1.5	1A	20†		
TK402	STC	PNP	16				1.5	1A	50†		
TK402A	STC	PNP	16				1.5	1A	15†		
TK403	STC	PNP	16				1.5	1A	20†		
TK403A	STC	PNP	16				1.5	1A	20†		
TM1	HIV	PNP	1								
TMT839	TT	NPN	81				5	1	20	35	45
TMT840	TT	NPN	81				5	1	40	70	90
TMT841	TT	NPN	81				5	1	80	140	330
TMT842	TT	NPN	81				5	1	20		
TMT843	TT	NPN	81				5	1	40		
TN301	SSP	NPN	35				1	50		50†	
TO101	UST	PNP	13				5	1		50	
TO102	UST	PNP	13				5	1		40	
TO103	UST	PNP	13				5	1		40	
TO104	UST	PNP	13				5	1		60	
TP1	STC	PNP(PC)	20				20	50 μ A	2		
TP2	STC	PNP(PC)	20				20	0.75	2		5
TR34	IND	PNP	17				6	1	10	15	20
TR43	IND	PNP	17				1.5	20		45†	
TR44	IND	PNP	17				1.5	20		30†	
TR45	IND	PNP	17				1.5	20		20†	
TR320	IND	PNP	17				1.5	20		50†	
TR321	IND	PNP	17				1.5	20		80†	
TR323	IND	PNP	17				1.5	20		75†	
TR383	IND	PNP	17				1.5	150		72	
TR482	IND	PNP	17					1		20	
TR508	IND	PNP	17				1.5	20		126†	
TR650	IND	PNP	17				6	1	25	40	70
TR653	IND	PNP	17				6	1	25	40	70
TR721	IND	PNP	17				6	1	40	45	150
TR722	IND	PNP	17				6	1	15	22	45
TR-C44	IND	PNP	17				6	1		80	
TR-C45	IND	PNP	17				6	1		40	
TR-C70	IND	PNP	17				10	0.5		30	
TR-C71	IND	PNP	17				10	3		60	
TR-C72	IND	PNP	17				12	10		100	
TR-C72M	IND	PNP	17				12	10		100	
TS1	STC	PNP	15				4	2	10	20	30
TS2	STC	PNP	15				4	2	30	40	50
TS3	STC	PNP	15				4	2	50	70	
TS3-Z	STCA	PNP	15				4.5	2	50	70	
TS4	STC	PNP	4				1.5	20	10	20	
TS7	STC	PNP	4				4.5	1	20	45	100
TS8	STC	PNP	4				4.5	1	20	60	150
TS9	STC	PNP	4				10.5	10		70	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			25	100	300		TK264A
			15	10A	20.0W†		TK400
			15	10A	24.0W†		TK400A
			40	10A	20.0W†		TK401
			40	10A	24.0W†		TK401A
			40	10A	20.0W†		TK402
			40	10A	24.0W†		TK402A
			60	7.5A	20.0W†		TK403
			60	7.5A	24.0W†		TK403A
			30		50		TM1
5	1	15	45	20	150		TMT839
			45		150		TMT840
			45	20	150		TMT841
			45	20	150		TMT842
			45	20	150		TMT843
			80	3A	30.0W†		TN301
5	1	15	7		100		T0101
5	1	15	7		100		T0102
5	1	15	9		100		T0103
5	1	15	12		120		T0104
			50	30	150		TP1
			50	30	150		TP2
			25	150	120		TR34
				400	140		TR43
				400	150		TR44
				400	150		TR45
			16	200	150		TR320
			16	200	150		TR321
			12	200	150		TR323
			15	200	150		TR383
			10	200	150		TR482
4.5	0.5	10	12	200	150		TR508
4.5	0.5	10	25	400	150		TR650
			20	400	150		TR653
			22	200	150		TR721
		25*	22	200	150		TR722
			10		150		TR-C44
			12		150		TR-C45
			12		150		TR-C70
			12		150		TR-C71
			16		150		TR-C72
			16		150		TR-C72M
1.5	0.2	15*	20	25	50		TS1
1.5	0.2	15*	20	25	50		TS2
1.5	0.2	15*	20	25	50		TS3
1.5	0.2	15*	30	25	75		TS3-Z
			30	50	50		TS4
			12		70		TS7
			6		70		TS8
			28		130		TS9

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I'_{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
TS10	WES	NPN	67				2	2A	10†		
TS11	WES	NPN	67				2	2A	10†		
TS12	WES	NPN	67				2	2A	10†		
TS13	WES	NPN	67				2	2A	10†		
TS13	STC	PNP	15				9	1	40	60	90
TS14	WES	NPN	67				2	2A	10†		
TS14	STC	PNP	15				9	1	20	35	45
TS15	WES	NPN	67				2	2A	10†		
TS15	STC	PNP	15				9	1	20	35	50
TS16	WES	NPN	67				2	2A	10†		
TS17	STC	PNP	4				9	1		90	
TS20	WES	NPN	67				2	5A	10†		
TS21	WES	NPN	67				2	5A	10†		
TS22	WES	NPN	67				2	5A	10†		
TS23	WES	NPN	67				2	5A	10†		
TS24	WES	NPN	67				2	5A	10†		
TS25	WES	NPN	67				2	5A	10†		
TS26	WES	NPN	67				2	5A	10†		
TS61	NOR	NPN	12				10	150	40		120
TS62	NOR	NPN	17				10	10	35		200
TS64	NOR	NPN	17				10	150	40		120
TS65	NOR	NPN	17				10	150	40		120
TS66	NOR	NPN	17				10	150	40		120
TS81	NOR	PNP	17				1	10	30		90
TS82	NOR	PNP	17				1	10	30		90
TS86	NOR	PNP	17				5	1	25		75
TS87	NOR	PNP	17				5	1	30		100
TS176	TS	PNP	16				12	500	30	50	
TS601	TS	PNP	13				1	10	15†		60†
TS602	TS	PNP	13				1	10	60†		
TS603	TS	PNP	13				1	10	15†		60†
TS604	TS	PNP	13				1	10	60†		
TS605	TS	PNP	13				1		15†		
TS606	TS	PNP	13				1		15†		
TS613	TS	PNP	16				1	500		80†	
TS614	TS	PNP	16								
TS616	TS	PNP	13				1	20	35†	50†	65†
TS617	TS	PNP	13				1.5	20		52	
TS618	TS	PNP	13				5	10	90	115	135
TS619	TS	PNP	16				2	500		60†	
TS627	TS	PNP	13/17								
TS629	TS	PNP	13/17								
TS672A	TS	PNP	13/17								
TS672B	TS	PNP	13/17								
TS673A	TS	PNP	13/17								
TS673B	TS	PNP	13/17								
TS748	TS	PNP	25								
TS1007	TS	PNP	13/17								
UNI-TRAN	UST	PNP	13				5	1		110	
U15A	SEM	PNP	16				1.5	15A	20†	40†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
4.5	0.5	12	20	30			TS10
			60	20			TS11
			100	20			TS12
			150	20			TS13
			20	25	70		TS13
4.5	0.5	12	200	20			TS14
			20	25	70		TS14
			250	20			TS15
4.5	0.5	12	45		50		TS15
			300	20			TS16
			18		130		TS17
			30	5A			TS20
			60	5A			TS21
			100	5A			TS22
			150	5A			TS23
			200	5A			TS24
			250	5A			TS25
			30	5A			TS26
					2.6W		TS61
					300		TS62
					800		TS64
					800		TS65
					800		TS66
					600		TS81
					600		TS82
					800		TS86
					800		TS87
			30	2A	10.0W		TS176
				400	200		TS601
				400	200		TS602
				400	200		TS603
				400	200		TS604
							TS605
							TS606
							TS613
6	1	6	40	5A	15.0W†		TS614
			30	5A	50.0W†		TS616
			25	200	200		TS617
6	1	5	25	200	150		TS618
			25	400	200		TS619
			20	5A	50.0W†		TS627
			18	400	200		TS629
			25	400	200		TS672A
			12	200	130		TS672B
			12	200	130		TS673A
			12	200	130		TS673B
							TS748
			12	400	200		TS1007
			15	400	150		UNI-TRAN
			75	20A	80.0W†		U15A

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
U15B	SEM	PNP	16				1.5	15A	50†	100†	
μ 7003	PCO	NPN	122				0.5	10	20†		120†
UST10	UST	PNP	13				6	1		22	
UST19	UST	PNP	13				6	1		80	
UST81	UST	PNP	13				6	1		90	
UST87	UST	PNP	13				6	1		38	
UST88	UST	PNP	13				6	1		80	
UST413	UST	PNP	13				5	1	30	40	50
UST721	UST	PNP	13				6	1	40		140
UST722	UST	PNP	13				6	1		22	
UST760	UST	PNP	13				6	1		40	
UST761	UST	PNP	13				6	1		75	
UST762	UST	PNP	13				6	1		95	
UST763	UST	PNP	13				6	1		120	
UST764	UST	PNP	13				6	1		200	
V6/2R	NM	PNP	5				4.5	1	10	30	50
V6/2RC	NM	PNP	4				4.5	1	10	30	50
V6/2RJ	NM	PNP	17				4.5	1		30	
V6/4R	NM	PNP	5				4.5	1	30	50	100
V6/4RC	NM	PNP	4				4.5	1	30	50	100
V6/4RJ	NM	PNP	17				4.5	1		50	
V6/8R	NM	PNP	5				4.5	1	50	80	200
V6/8RC	NM	PNP	4				4.5	1	50	80	200
V6/8RJ	NM	PNP	17				4.5	1		80	
V6/R2	NM	PNP	5				4.5	1	10	25	50
V6/R4	NM	PNP	5				4.5	1	30	50	100
V6/R8	NM	PNP	5				4.5	1	50	80	200
V10/1S	NM	PNP	5				4.5	1	30	66	200
V10/1S-1	NM	PNP	5				4.5	1	30	66	200
V10/1S-2	NM	PNP	5				4.5	1	30	66	200
V10/1SC	NM	PNP	4				4.5	1	30	66	200
V10/1SJ	NM	PNP	17				0.35	400		40†	
V10/2S	NM	PNP	5				4.5	1	30	66	200
V10/2SC	NM	PNP	4				4.5	1	30	66	200
V10/2SJ	NM	PNP	17				0.35	400		25†	
V10/15A	NM	PNP	5				4.5	1	15	20	30
V10/15AC	NM	PNP	4				4.5	1	15	20	30
V10/25	NM	PNP	17				1.5	10		25	
V10/30A	NM	PNP	5				4.5	1	30	40	50
V10/30AC	NM	PNP	4				4.5	1	30	40	50
V10/50A	NM	PNP	5				4.5	1	50	75	125
V10/50AC	NM	PNP	5				4.5	1	50	75	125
V10/50B	NM	PNP	5				4.5	1	50	75	125
V15/10DP	NM	PNP	16				1.5	200	10†	18†	20†
V15/10P	NM	PNP	7,18				1.5	200	10	18	20
V15/15NP	NM	PNP	8				1.5	200	15	25	30
V15/20DP	NM	PNP	16				1.5	200	20†	24†	30†
V15/20IP	NM	PNP	6				1.5	20	20	40	100
V15/20P	NM	PNP	7,18				1.5	200	20	24	30
V15/20R	NM	PNP	9				6	1	10	50	150

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			75	30A	80.0W†		U15B
			6		200		μ7003
					165		UST10
					165		UST19
	12*				165		UST81
					165		UST87
					165		UST88
			26	100	100		UST413
			22	100	150		UST721
	16		22	100	150		UST22
					150		UST760
					150		UST761
					150		UST762
					150		UST763
					150		UST764
			6	30	125†		V6/2R
			6	30	125†		V6/2RC
				30	75		V6/2RJ
			6	30	125†		V6/4R
			6	30	125†		V6/4RC
				30	75		V6/4RJ
			6	30	125†		V6/8R
			6	30	125†		V6/8RC
				30	75		V6/8RJ
			6	12	75		V6/R2
			6	12	75		V6/R4
			6	12	75		V6/R8
			10	500	75		V10/1S
			15	500	75		V10/1S-1
			20	500	75		V10/1S-2
			10	500	75		V10/1SC
				500	75		V10/1SJ
			10	500	75		V10/2S
			10	500	75		V10/2SC
				500	75		V10/2SJ
2	0.5	12	10	30	200†		V10/15A
2	0.5	12	10	30	200†		V10/15AC
			20	500			V10/25
2	0.5	12	10	30	200†		V10/30A
2	0.5	12	10	30	200†		V10/30AC
2	0.5	12	10	30	200†		V10/50A
			10	30	125		V10/50AC
4.5	1	16	10	30	100		V10/50B
			5	3A			V15/10DP
			15	3A	1.0W		V15/10P
			15	6A	1.5W		V15/15NP
			5	3A			V15/20DP
			15	2A	500		V15/20IP
			15	3A	1.0W		V15/20P
							V15/20R

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{co}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
V15/20R-1	NM	PNP	9				6	1	10	25	50
V15/20R-2	NM	PNP	9				6	1	50	80	150
V15/30DP	NM	PNP	16				1.5	200	30†	38†	
V15/30NP	NM	PNP	16				1.5	200	30	40	60
V15/30P	NM	PNP	7, 18				1.5	200	30	40	
V20/20P	NM	PNP	7, 18				1.5	200	20	24	30
V20/30P	NM	PNP	7, 18				1.5	200	20	38	
V30/10DP	NM	PNP	16				1.5	200	10†	18†	20†
V30/10P	NM	PNP	7, 18				1.5	200	10	18	20
V30/15NP	NM	PNP	8				1.5	200	15	25	30
V30/20DP	NM	PNP	16				1.5	200	20†	24†	30†
V30/20IP	NM	PNP	6				1.5	20	20	40	100
V30/20P	NM	PNP	7, 18				1.5	200	20	24	30
V30/30DP	NM	PNP	16				1.5	200	20†	38†	
V30/30NP	NM	PNP	8				1.5	200	30	40	60
V30/30P	NM	PNP	7, 18				1.5	200	30	38	
V60/10DP	NM	PNP	16				1.5	200	10†	18†	20†
V60/10P	NM	PNP	7, 18				1.5	200	10	18	20
V60/20DP	NM	PNP	16				1.5	200	20†	24†	30†
V60/20IP	NM	PNP	6				1.5	200	20	40	100
V60/20P	NM	PNP	7, 18				1.5	200	20	24	30
V60/30DP	NM	PNP	16				1.5	200	30†	38†	
V60/30P	NM	PNP	7, 18				1.5	200	30	38	
V205	SGS	PNP	17								
V405	SGS	PNP	17								
V405A	SGS	PNP	17				2	5		30†	
V410	SGS	PNP	17				10	10		130	
VB701	EE	PNP	13				4	0.7	33		125
VB704	EE	PNP	13				6	1	27		70
VB709	EE	PNP	13				10	0.5	50		150
VGT5151	GI	PNP					0.25	100	60†		
WT10	WH	NPN	67				2	500	20†		
WT11	WH	NPN	67				2	500	20†		
WT12	WH	NPN	67				2	500	20†		
WT13	WH	NPN	67				2	500	20†		
WT14	WH	NPN	67				2	500	20†		
WT20	WH	NPN	67				2	500	25†		
WT21	WH	NPN	67				2	500	25†		
WT22	WH	NPN	67				2	500	25†		
WT23	WH	NPN	67				2	500	25†		
WT24	WH	NPN	67				2	500	25†		
WX115UA	WES	NPN	84				12	2A		30	
WX115UB	WES	NPN	84				12	2A		30	
WX115UC	WES	NPN	84				12	2A		30	
WX115UD	WES	NPN	84				12	2A		30	
WX115WA	WES	NPN	84				12	3.75A		23	
WX115WB	WES	NPN	84				12	3.75A		23	
WX115WC	WES	NPN	84				12	3.75A		23	
WX115XA	WES	NPN	84				12	5A		27	
WX115XB	WES	NPN	84				12	5A		27	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
					75		V15/20R-1
					75		V15/20R-2
			5	3A			V15/30DP
			15	6A	1.5W		V15/30NP
			15	3A	1.0W		V15/30P
							V20/20P
							V20/30P
							V30/10DP
			10	3A			V30/10P
			30	3A	1.0W		V30/15NP
			30	6A	1.5W		
							V30/20DP
			10	3A			V30/20IP
			30	2A	500		V30/20P
			30	3A	1.0W		V30/30DP
			10	3A			V30/30NP
			30	6A	1.5W		
							V30/30P
			30	3A	1.5W		V60/10DP
			20	3A			V60/10P
			60	3A	1.0W		V60/20DP
			20	3A			V60/20IP
			60	2A	2.0W		
							V60/20P
			60	3A	1.0W		V60/30DP
			20	3A			V60/30P
			60	3A	1.0W		
5	50μA	4.5	10		300		V205
			10		300		V405
							V410
			20	500	700		V405A
			12		300		VB701
4	0.7	8	30	50	50		VB704
6	1	10*	30	50	50		VB709
				50	50		
							VGT5151
			10		200		WT10
			30	7.5A			WT11
			60	7.5A			WT12
			100	7.5A			WT13
			150	7.5A			
							WT14
			200	7.5A			WT20
			30	7.5A			WT21
			60	7.5A			WT22
			100	7.5A			WT23
			150	7.5A			
							WT24
			200	7.5A			WX115UA
			50	30A	250.0W†		WX115UB
			100	30A	250.0W†		WX115UC
			150	30A	250.0W†		WX115UD
			200	30A	250.0W†		
							WX115WA
			50	30A	250.0W†		WX115WB
			100	30A	250.0W†		WX115WC
			150	30A	250.0W†		WX115XA
			50	30A	250.0W†		WX115XB
			100	30A	250.0W†		

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
WX115XC	WES	NPN	84				4	20A	10†		
WX115XD	WES	NPN	84				4	20A	10†		
WX118UA	WES	NPN	67				6	10A	100†	360†	
WX118UB	WES	NPN	67				6	10A	100†	360†	
WX118UC	WES	NPN	67				6	10A	100†	360†	
WX118XC	WES	NPN	67				6	10A	400†	660†	
WX1015	WES	NPN	67				2	2A	10†		
WX1015A	WES	NPN	67				2	2A	10†		
WX1015B	WES	NPN	67				2	2A	10†		
WX1015C	WES	NPN	67				2	2A	10†		
WX1015D	WES	NPN	67				2	2A	10†		
WX1015E	WES	NPN	67				2	2A	10†		
WX1015F	WES	NPN	67				2	2A	10†		
WX1016	WES	NPN	67				2	5A	10†		
WX1016A	WES	NPN	67				2	5A	10†		
WX1016B	WES	NPN	67				2	5A	10†		
WX1016C	WES	NPN	67				2	5A	10†		
WX1016D	WES	NPN	67				2	5A	10†		
WX1016E	WES	NPN	67				2	5A	10†		
WX1016F	WES	NPN	67				2	5A	10†		
X110	BEN	PNP	16								
X113	BEN	PNP	16								
X114	BEN	PNP	16								
X351A	TII	NPN	35								
X351B	TII	NPN	35								
XA101	ES	PNP	1				4.5	1	20	35	
XA102	ES	PNP	1				5	1	25	60	
XA103	ES	PNP	1				5	1	15	35	
XA104	ES	PNP	1				5	1	18	60	
XA111	ES	PNP	13				4.5	1	20	35	
XA112	ES	PNP	13				4.5	1	25	60	
XA121	ES	PNP	3				12	1		60	
XA122	ES	PNP	3				12	1		60	
XA123	ES	PNP	3				12	1		60	
XA124	ES	PNP	3				12	1		60	
XA125	ES	PNP	13				12	1		60	
XA126	ES	PNP	3				12	1		60	
XA131	ES	PNP	3				12	1.5	20	60	175
XA141	ES	PNP	13				7	5	20†	45†	
XA142	ES	PNP	13				7	5	20†	45†	
XA143	ES	PNP	13				7	5	20†	45†	
XA151	ES	PNP	13				0.25	50	20†	40†	80†
XA152	ES	PNP	13				0.25	50	40†	80†	
XA161	ES	PNP	13				0.3	10		50	
XA162	ES	PNP	13				0.3	10		50	
XA191	ES	PNP	13				5	1	20	35	
XA192	ES	PNP	13				5	1	25	60	
XA701	ES	NPN	13				0.2	20	20†	40†	
XA702	ES	NPN	13				0.2	20	30†	50†	
XA703	ES	NPN	13				0.2	20	40†	70†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
V _{ce}	I _c mA	db	V _{ce}	I _c mA	P _c mW		
			150	30A	250.0W†		WX115XC
			200	30A	250.0W†		WX115XD
			50	10A	150.0W†		WX118UA
			100	10A	150.0W†		WX118UB
			150	10A	150.0W†		WX118UC
			150	10A	150.0W†		WX118XC
			30	5A			WX1015
			60	5A			WX1015A
			100	5A			WX1015B
			150	5A			WX1015C
			200	5A			WX1015D
			250	5A			WX1015E
			300	5A			WX1015F
			30	5A			WX1016
			60	5A			WX1016A
			100	5A			WX1016B
			150	5A			WX1016C
			200	5A			WX1016D
			250	5A			WX1016E
			300	5A			WX1016F
			40	3A	10.0W†		X110
				3A	10.0W†		X113
				3A	10.0W†		X114
			60	15A			X351A
			80	15A			X351B
			16		60		XA101
			16		60		XA102
			12		60		XA103
			12		60		XA104
			10		80		XA111
			10		80		XA112
				10	80		XA121
				10	80		XA122
				10	80		XA123
				10	40		XA124
				10	80		XA125
				10	40		XA126
			40	10	120		XA131
			29	100	120		XA141
			29	100	120		XA142
			29	100	120		XA143
			15		66		XA151
			15		66		XA152
			12	100	150		XA161
			12	100	150		XA162
			16		50		XA191
			16		50		XA192
			15	200	120		XA701
							XA702
							XA703

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
XB102	ES	PNP	1	12		250 μ A	5	1	20	30	44
XB103	ES	PNP	1	12		250 μ A	5	1	45	66	100
XB104	ES	PNP	1				5	1	18	30	47
XB112	ES	PNP	13				4.5	1	18	30	47
XB113	ES	PNP	13				4.5	1	40	66	105
XB114	ES	PNP	13				4.5	1	18		47
XB121	ES	PNP	13				0.35	5	20†	60†	
XC101	ES	PNP	1				6	8		66	
XC111	ES	PNP	13				6	8			66
XC121	ES	PNP	13				1	50	48†		88†
XC131	ES	PNP	13				1	50	48†		88†
XC141	ES	PNP	16				1.5	700		62	
XC142	ES	PNP	16				1.5	700		62	
XC143	ES	PNP	16				1.5	700		62	
XC155	ES	PNP	16				1.5	900		65	
XC156	ES	PNP	16				1.5	900		65	
XC171	ES	PNP	13				1	400	40†	72†	
XC703	ES	NPN	13				4	5		50	
XC704	ES	NPN	13				4	5		50	
XC713	ES	NPN	13				4	750	15†		75†
XC723	ES	NPN	16				4	1.5A	10†		50†
XF11	HIV	PNP	48				3	0.5		40	
XPT2	HIV	PNP	48				10	100	8†		100†
XN102	MR	PNP					12	100	8†		100†
XN102B	MR	PNP									
XS101	ES	PNP	1				5	1	10	20	
XS104	ES	PNP	1				5	1	10	20	
XS111	ES	PNP	13				4.5	1	10	20	
XS121	ES	PNP	13				5	1	10	20	
XT1A	JL	NPN	17						12†		36†
XT1B	JL	NPN	17						12†		36†
XT1C	JL	NPN	17						12†		36†
XT1D	JL	NPN	17						12†		36†
XT2A	JL	NPN	25				5	5A	10†		50†
XT2B	JL	NPN	25				5	5A	10†		50†
XT2C	JL	NPN	25				5	5A	10†		50†
ZT2D	JL	NPN	25				5	5A	10†		50†
XT-100	SPR	PNP	13				1.5	400		35†	
XT-200	SPR	PNP	13								
XT518	PSI	NPN					50	30		13	
XT519	PSI	NPN					50	30		13	
XT520	PSI	NPN					50	30		13	
Y214N5	ES	PNP	16				1.5	900		65	
Y214N6	ES	PNP	16				0.5	900		65	
Y216J	ES	PNP	13				1	30	36†	56†	
Y400J1	ES	NPN	13				5	1		30	
Y400J2	ES	NPN	13				6	1		75	
ZDT10	FER	NPN	17				6	0.2	20†		
ZDT11	FER	NPN	17				6	0.2	20†		
ZDT20	FER	NPN	101				6	0.2	20†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
2	0.5	6	10		30		XB102
2	0.5	6	10		30		XB103
3	0.5	6	16		60		XB104
3	0.5	6	16		90		XB112
2	0.5	6	16		150		XB113
3	0.5	6	16		30		XB114
			105	100	50		XB121
			16		100		XC101
			16		100		XC111
			16		150		XC121
			16		300		XC131
			20	1.5A	11.0W†		XC141
			16	1.5A	11.0W†		XC142
			16	1.5A	11.0W†		XC143
			50	5A	50.0W†		XC155
			65	5A	10.0W†		XC156
			16		450		XC171
			40	1.5A	4.0W†		XC703
			40	1.5A	4.0W†		XC704
			40	3A	15.0W†		XC713
			40	6A	60.0W†		XC723
			4.5		6		XFT1
			4.5		25		XFT2
			25	500	3.0W†		XN102
			25	500	3.0W†		XN102B
0.5	16		12		90		XS101
			12		90		XS104
			12				XS111
			12		90		XS121
			135	300	600		XT1A
			200	300	600		XT1B
			265	300	600		XT1C
			350	300	600		XT1D
			135	5A	50.0W†		XT2A
			200	5A	50.0W†		XT2B
			265	5A	50.0W†		XT2C
			350	5A	50.0W†		XT2D
			30	500	200		XT100
				300	250		XT200
				75	2.8W		XT518
				75	2.8W		XT519
				75	2.8W		XT520
			50	5A	50.0W†		Y214N5
			65	5A	10.0W†		Y214N6
			16		150		Y216J
			16		100		Y400J1
			16		100		Y400J2
			10	50	300		ZDT10
			10	50	300		ZDT11
			35	50	300		ZDT20

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
ZDT21	FER	NPN	101				6	0.2	20†		
ZDT30	FER	NPN	128								
ZDT31	FER	NPN	128								
ZT20	FER	NPN	13				6	10	18†	30	42
ZT21	FER	NPN	13				6	10	38	60	82
ZT22	FER	NPN	13				6	10	18	30	42
ZT23	FER	NPN	13				6	10	38	60	82
ZT24	FER	NPN	17				6	1		65	
ZT40	FER	NPN	13				6	1		30	
ZT41	FER	NPN	13				6	1		50	
ZT42	FER	NPN	13				6	1		30	
ZT43	FER	NPN	13				6	1		50	
ZT44	FER	NPN	17				6	1		90	
ZT50	FER	NPN	13				6	100	20†		
ZT60	FER	NPN	17				6	1		55	
ZT61	FER	NPN	17				6	1		55	
ZT62	FER	NPN	17				6	1		90	
ZT63	FER	NPN	17				6	1		55	
ZT64	FER	NPN	17				6	1		90	
ZT66	FER	NPN	17				6	1		55	
ZT68	FER	NPN	17				6	1		90	
ZT80	FER	NPN	17				6	1		55	
ZT81	FER	NPN	17				6	1		55	
ZT82	FER	NPN	17				6	1		90	
ZT83	FER	NPN	17				6	1		55	
ZT84	FER	NPN	17				6	1		90	
ZT86	FER	NPN	17				6	1		55	
ZT87	FER	NPN	17							90	
ZT88	FER	NPN	17				6	1		90	
ZT89	FER	NPN	17				6	1		90	
ZT90	FER	NPN	17				10	10	75†		200†
ZT91	FER	NPN	17				10	200	40†		120†
ZT92	FER	NPN	17				10	200	65†		200
ZT110	FER	NPN	17				6	1		55	
ZT111	FER	NPN	17				6	1		55	
ZT112	FER	NPN	17				6	1		90	
ZT113	FER	NPN	17				6	1		55	
ZT114	FER	NPN	17				6	1		90	
ZT116	FER	NPN	17				6	1		55	
ZT117	FER	NPN	17				6	1		90	
ZT118	FER	NPN	17				6	1		90	
ZT119	FER	NPN	17				6	1		90	
ZT202	FER	NPN	13				6	1		30	
ZT203	FER	NPN	13				6	1		50	
ZT204	FER	NPN	13				6	1		100	
ZT402	FER	NPN	13				6	1		30	
ZT403	FER	NPN	13				6	1		50	
ZT404	FER	NPN	13				6	1		100	
ZT696	FER	NPN	17								
ZT697	FER	NPN	17								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			35	50	300		ZD121
				50	150		ZDT30
				50	150		ZDT31
			20	50	350		ZT20
			20	50	250		ZT21
			45	50	350		ZT22
			45	50	350		ZT23
			45	50	350		ZT24
			45	50	300		ZT40
			45	50	300		ZT41
6	1	9	45	50	300		ZT42
6	1	9	45	50	300		ZT43
			45	50	300		ZT44
			20		5.0W†		ZT50
6	0.1	6	25	500	350		ZT60
6	0.1	6	35	500	350		ZT61
6	0.1	6	35	500	350		ZT62
6	0.1	6	45	500	350		ZT63
6	0.1	6	45	500	350		ZT64
6	0.1	6	80	500	350		ZT66
6	0.1	8	80		750		ZT68
6	0.1	6	25	500	300		ZT80
6	0.1	6	35	500	300		ZT81
6	0.1	6	35	500	300		ZT82
6	0.1	6	45	500	300		ZT83
6	0.1	6	45	500	300		ZT84
6	0.1	6	80	500	300		ZT86
6	0.1	6	25	500	300		ZT87
6	0.1	6	80	500	300		ZT88
6	0.1	6	70		300		ZT89
			60	1A	1.0W		ZT90
			100	1A	1.0W		ZT91
			100	1A	1.0W		ZT92
6	0.1	6	25	500	300		ZT110
6	0.1	6	35	500	300		ZT111
6	0.1	6	35	500	300		ZT112
6	0.1	6	45	500	300		ZT113
6	0.1	6	45	500	300		ZT114
6	0.1	6	80	500	300		ZT116
6	0.1	6	25	500	300		ZT117
6	0.1	6	80	500	300		ZT118
6	0.1	6	70	500	300		ZT119
			20	50	300		ZT202
			20	50	300		ZT203
			20	50	300		ZT204
			20	50	300		ZT402
			20	50	300		ZT403
			20	50	300		ZT404
			40	500	600		ZT696
			40	500	600		ZT697

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
ZT706	FER	NPN	13				1	10	20†		
ZT706A	FER	NPN	17				1	10	20†		60†
ZT708	FER	NPN	13				10	1	30†		120†
ZT709	FER	NPN	17				0.5	10	20†	50†	120†
ZT1479	FER	NPN	13				4	200	20†		60†
ZT1480	FER	NPN	13				4	200	20†		60†
ZT1481	FER	NPN	13				4	200	35†		100†
ZT1482	FER	NPN	13				4	200	35†		100†
ZT1483	FER	NPN	13				4	750	20†		60†
ZT1484	FER	NPN	13				4	750	20†		60†
ZT1485	FER	NPN	13				4	750	35†		100†
ZT1486	FER	NPN	13				4	750	35†		100†
ZT1487	FER	NPN	16				4	1.5A	15†		45†
ZT1488	FER	NPN	16				4	1.5A	15†		45†
ZT1489	FER	NPN	16				4	1.5A	25†		75†
ZT1490	FER	NPN	16				4	1.5A	25†		75†
ZT1511	FER	NPN	25				4	1.5A	15†		45†
ZT1512	FER	NPN	25				4	1.5A	15†		45†
ZT1513	FER	NPN	25				4	1.5A	25†		75†
ZT1514	FER	NPN	25				4	1.5A	25†		75†
ZT1613	FER	NPN	17				10	10	35†		
ZT1700	FER	NPN	17				4	100	20†		80†
ZT1701	FER	NPN	13				4	300	20†		80†
ZT1702	FER	NPN	16				4	800	15†		60†
ZT1703	FER	NPN	25				4	800	15†		60†
ZT1708	FER	NPN	13				1	10	20†		
ZT1711	FER	NPN	17				10	0.1	35†		
ZT2015	FER	NPN	25				4	5	15†		50†
ZT2016	FER	NPN	25				4	5	15†		50†
ZT2102	FER	NPN	17				10	10	35†		
ZT2205	FER	NPN	17				1	10	20†		
ZT2206	FER	NPN	17				1	10	40†		120†
ZT2270	FER	NPN	17				10		35†		
ZT2369A	FER	NPN	17				1	10	40†		150†
ZT2475	FER	NPN	13				0.4	20	30†	50†	150†
ZT2476	FER	NPN	17				0.4	150	20†		
ZT2477	FER	NPN	17				0.4	150	40†		
ZT2631	FER	NPN	17								
ZT2708	FER	NPN	9				15	2	30		180
ZT2857	FER	NPN	9				6	2	50		220
ZT2876	FER	NPN	73								
ZT2938	FER	NPN	17				350mV	10	25†	125†	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			20		300		ZT706
			20		300		ZT706A
			20		360		ZT708
			6		300		ZT709
			60	1.5A	5.0W†		ZT1479
			100	1.5A	5.0W†		ZT1480
			60	1.5A	5.0W†		ZT1481
			100	1.5A	5.0W†		ZT1482
			40	3A	25.0W†		ZT1483
			55	3A	25.0W†		ZT1484
			40	6A	75.0W†		ZT1489
			40	6A	75.0W†		ZT1511
			55	6A	75.0W†		ZT1512
			40	6A	75.0W†		ZT1513
			55	6A	75.0W†		ZT1514
			50	1A	800		ZT1613
			40	1A	5.0W†		ZT1700
			40	2.5A	25.0W†		ZT1701
			40	5A	75.0W†		ZT1702
			40	5A	43.0W†		ZT1703
			20	200	300		ZT1708
10	0.3	8*	50		800		ZT1711
			50	10A	85.0W†		ZT2015
			65	10A	85.0W†		ZT2016
10	0.3	6*	65	1A	1.0W		ZT2102
			20	200	300		ZT2205
			20	200	300		ZT2206
10	0.3	6*	45	1A	1.0W		ZT2270
			15		300		ZT2369A
			6		300		ZT2475
			20		600		ZT2476
			20		600		ZT2477
			60	1.5A	8.7W†		ZT2631
			20		200		ZT2708
			15		200		ZT2857
			60	2.5A	17.5W†		ZT2876
			13	500	300		ZT2938

APPENDIX I

TEST DATA FOR CV TRANSISTORS

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
CV2389		PNP	1				6	1	30		70
CV2400		PNP	1/13								
CV5105		PNP	1	2		40 μ A	6	1	25	40	125
CV5309		PNP	7/18				1.5	200	20	24	30
CV5321		PNP	16				1.5	1A		130†	
CV5322		PNP	15				9	1	32	43	55
CV5327		PNP	6				1.5	20	20	40	100
CV5328		PNP	16				1	1A	25†		75†
CV5329		PNP	16				1	1A	20†		55†
CV5330		PNP	5				4.5	1	50	75	125
CV5334		PNP	17	75	400nA	1nA	5	1	10	20	40
CV5335		PNP	13				6	1	9	18	
CV5337		PNP	1	4.5		200 μ A	10	0.5	30	45	65
CV5352		PNP	17	30	400nA	2 μ A	5	1	20	30	50
CV5353		PNP	1	12		75 μ A	5	1	10	20	
CV5359		NPN	17				5	1	9	12	20
CV5383		PNP	16				1.5	1A		130†	
CV5411		PNP	24				4.5	50	40	60	90
CV5416		PNP	1				6	1	65	90	130
CV5432		PNP	16				1	1A	25†		75†
CV5439		PNP	1	4.5	350 μ A	500 μ A	2	3	65	90	130
CV5445		PNP	5				4.5	1	50		200
CV5449		PNP	3				6	1	45		
CV5457		PNP	1	4.5	110 μ A	225 μ A	2	0.5	20	30	40
CV5459		PNP	24				6	1	35	55	80
CV5465		PNP	16				1.5	100		40†	
CV5620		NPN	11				5	1	33	55	200
CV5621		NPN	32				6	250	10†	40†	
CV5622		PNP	21				24	50	21†	36†	
CV5623		PNP	3				9	1	20	60	175
CV5624		PNP	31				12	1.5	20	60	175
CV5625		NPN	17				5	1	9	15	22
CV5626		NPN	17				20	1	19	55	
CV5627		NPN	17				10	5	9		90
CV5628		PNP	10				3	0.5	11	22	33
CV5629		NPN	13				5	1		45	
CV5630		PNP	31	20		1mA	12	1.5	20	60	175
CV5631		PNP	17				5	10		86	
CV5632		PNP	16				1.5	1A		130†	
CV5633		PNP	16				1.5	1A		130†	
CV5636		NPN	13	100		250 μ A	10	200	12†	20†	36†
CV5637		NPN	13				6	1	80	13	200
CV5638		NPN	17				6	200	20†		80†
CV5639		NPN	13				0.2	20	20†	40†	60†
CV5640		PNP	16				12	500		60	
CV5641		PNP	17				6	1	50	75	125
CV5642		PNP	13				1.5	1A	40†	100	250†
CV5643		PNP	13				1.5	1A	40†	100	250†
CV5644		NPN	17				5	1	30	70	
CV5645		PNP	73	25		20mA	1.5	500	25		100

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
2	0.5	12	10	10	25		CV2389
			10	10	25		CV2400
			10	5	75		CV5105
			15	3A	1.0W		CV5309
			40	5A	50.0W†		CV5321
5	0.5	10	25		50		CV5322
			30	2A	500		CV5327
			32	6A	30.0W†		CV5328
			60	6A	12.0W†		CV5329
2	0.5	12	10	30	200		CV5330
3	0.5	10	50	50	330		CV5334
			25	50	150		CV5335
			30	10	125		CV5337
			30	50	330		CV5352
			12		90		CV5353
			40	25	150		CV5359
			80	5A	50.0W†		CV5383
			40	500	330		CV5411
			32	500	60		CV5416
			32	6A	30.0W†		CV5432
3	0.5	10	20	10	75		CV5439
6	1	15	30	125	180		CV5445
6	1	15	40	15	100		CV5449
2	0.5	10	20	10	125		CV5457
3	0.5	12	30	250	200		CV5459
1.5	0.5	12	60	15A	80.0W†		CV5465
			15	25	65		CV5620
			60	800	1.0W		CV5621
					20.0W†		CV5622
			35	10	35		CV5623
5	1	12	40	10	120		CV5624
			45	25	120		CV5625
			30	20	125		CV5626
			55	60	1.0W		CV5627
			5	5	20		CV5628
6	1	3.5	15	500	100		CV5629
			40	10	120		CV5630
			24	100	120		CV5631
			60	5A	50.0W†		CV5632
			80	5A	50.0W†		CV5633
6	1	17	100	500	800		CV5636
			30		200		CV5637
			30		600		CV5638
			20	200	120		CV5639
			30	10A	50.0W†		CV5640
4.5	0.5	10	30	250	200		CV5641
			40	2A	300		CV5642
			75	2A	300		CV5643
			40	500	600		CV5644
			50	3A	20.0W†		CV5645

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{ce}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
CV5646		PNP	25				2	5A	25†		50†
CV5647		PNP	17				5	1	15		50
CV5648		NPN	17				6	10	20†	40†	
CV5649		PNP	13				2	400	40†		120†
CV5650		PNP	17				10	2	4	10	
CV5651		PNP	9				12	1.5	30†		100†
CV5652		NPN	5				5	1	9		20
CV5653		NPN	5				5	1	18		40
CV5654		NPN	5				5	1	37	63	90
CV5655		PNP	17				10	5	9	15	1000
CV5661		NPN	17								
CV5663		PNP	13				10	2	9	65	
CV5703		PNP	25				2	5A	35†		70†
CV5710		PNP	1				6	1	40	100	225
CV5711		PNP	1	6	200 μA	600 μA	5.4	10	45†		330†
CV5712		PNP	1	4.5	150 μA	325 μA	2	3	30	47	75
CV5713		PNP	1	6	125 μA	300 μA	6	8		50	
CV5733		PNP	25				2	5A	35†		70†
CV5740		PNP	25				6	1	45	70	120
CV5761		PNP	17				5	1	25		75
CV5762		PNP	13				1	100	70†	175†	
CV5773		PNP	25				1	5A	25†		50†
CV5775		PNP	16				4.5	500		110	
CV5776		NPN	27				4	250	11†		
CV5778		PNP	17				5	1	30	44	64
CV5779											
CV5780											
CV5781		NPN	5				6	1	25	75	125
CV5782		NPN	17				6	1	15	65	
CV5784		NPN	13				1	30	20†	40†	60†
CV5785		NPN	12				4.5	1		35	50
CV5789		NPN	17				5	1	18	30	44
CV5791		PNP	16				1.5	200	20†	24†	30†
CV5792		NPN	17	25	300nA	10 μA	6	1	30	50	90
CV5804		PNP	3				6	1	20		
CV5805		PNP	16				2	500	40†		
CV5806		PNP	13				1	100	40†	70†	
CV5813		PNP	3				6	100	50†	160†	
CV5814		PNP	47				4.5	1	20	40	35
CV5818		PNP	1								
CV5826		PNP	1				6	300	10†		
CV5832		PNP	13				1	100	100†	175†	300†
CV5833		PNP	36				4.5	1		90†	
CV5834		PNP	13								
CV5835		NPN	13				0.2	60	25†		
CV5836		PNP	13								
CV5837		PNP	13								
CV5838		PNP	13								
CV5839		PNP	13								
CV5840		PNP	13								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			65	15A	150.0W†		CV5646
			30	600	600		CV5647
			15		500		CV5648
			30	3A	1.0W		CV5649
			40		250		CV5650
				10	120		CV5651
				25	150		CV5652
				25	150		CV5653
				25	150		CV5654
				50	750		CV5655
			20	500	600		CV5661
1.0	1	3	16	200	200		CV5663
			50	15A	40.0W†		CV5703
			10	5	75		CV5710
2	0.5	15*	60	125	75		CV5711
3	0.5	10	20	10	125		CV5712
2	0.5	15*	12	125	125		CV5713
			40	15A	55.0W†		CV5733
3	0.5	8	15	30	250		CV5740
			30	600	600		CV5761
			40	400	500†		CV5762
			50	15A	40.0W†		CV5773
			80	6A	37.0W†		CV5775
			60	800	1.0W†		CV5776
5	1	6	30	500	225		CV5778
							CV5779
							CV5780
6	1	16	25	100	180		CV5781
			15	400	100		CV5782
			20	200	150		CV5784
1.5	0.5	6	25	20	65		CV5785
5	1	25	45	25	150		CV5789
			10	3A			CV5791
			25	20	100		CV5792
			20	10	50		CV5804
				3A	25.0W†		CV5805
			40	400	750		CV5806
			50	500	200		CV5813
4.5	0.5	4.5	10		200		CV5814
				100	160		CV5818
			24	250	260		CV5826
			20	400	250		CV5832
			15	150	75		CV5833
			12		45		CV5834
			25		45		CV5835
			10		45		CV5836
			10		45		CV5837
			10		45		CV5838
			20		45		CV5839
			17		45		CV5840

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
CV5841		NPN	13				0.1	60	25†		
CV5848		PNP	1				6	1	25		
CV5849		PNP	1				6	1	45		
CV5851		PNP	42								
CV5856		PNP	36				0.5		20†		
CV5857		PNP	1					10	40†		80†
CV5860		NPN	17	45		1 μ A	6	10	38†		
CV5861		PNP	9				6	1	40†		
CV5861		NPN	17	20		1 μ A	6	10	38†		82†
CV5865		PNP	1				1	150	10†		
CV5871		PNP	16				0.2	1A	45		130
CV5872		NPN	1					15	20†	43†	84†
CV5873		NPN	1					15	50†		150†
CV5874		PNP	1				6	1	40		180
CV5875		PNP	1				6	1	40		180
CV5876		PNP	16				0.2	1A	20†		55†
CV5884		PNP	1				6	1	25		125
CV5885		PNP	47				12	1	45	70	150
CV5887		PNP	13				0.5	30		60†	
CV5888		PNP	13				0.5	50	35†		75†
CV5902		PNP	36				2	1	30	55	80
CV5913		NPN	73				5	10	10†	30†	
CV5929		PNP	6				1.5	200	20	40	100
CV5942		PNP	13				10	2	10†	33†	
CV5949		PNP	16				1.5	100		35†	
CV5951		PNP	17				6	1	40		
CV5967		PNP	17				6	1	40†	100†	
CV5970		PNP	13				6	1	25	35	45
CV5974		NPN	17				5	5	20		50
CV5975		NPN	17				5	5	40		100
CV5978		PNP	17				10	1	40†		80†
CV5980		PNP	1				6	1		40	
CV5994		PNP	16				1.5	100		40†	
CV5995		NPN	17	25	400nA	20 μ A	6	1	60	120	250
CV5996		PNP	13								
CV7001		PNP	1/29				6	1	40		100
CV7002		PNP	1/29				6	10	40		100
CV7003		PNP	1/29				6	1	40		180
CV7004		PNP	1/29				6	1	25		125
CV7005		PNP	1/29				6	1	30		70
CV7006		PNP	1/29					80	30		90
CV7007		PNP	13					30			
CV7008		PNP	1/29				1.5	1	40		100
CV7009		PNP	1/29								
CV7011		PNP	7					200		38	
CV7012		PNP	7					200		38	
CV7042		PNP	1/13								
CV7043		PNP	1/29				6	1	15		60
CV7044		PNP	1/29				6	1	20		80
CV7054		PNP	16				2	1A	70†		300†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
2	0.5	6	17		45		CV5841
			25	50	200		CV5848
			15	50	200		CV5849
			40		1.3W		CV5851
			30		500		CV5856
6	1	22	15	50	80		CV5857
			45	50	350		CV5860
			20	10	100		CV5861
			20	50	350		CV5863
			60	250	260		CV5865
5	1	25*	60	8A	38.0W†		CV5871
			20	250	100		CV5872
			20	250	100		CV5873
			2	0.5	27		CV5874
			2	0.5	27		CV5875
2	0.5	22*	80	8A	1.3W		CV5876
				5	27		CV5884
			15		200		CV5885
			15	100	150		CV5887
			15	100	150		CV5888
4.5	0.5	6	30	150	200		CV5902
			60	750	2.0W†		CV5913
					500		CV5929
			15	50	60		CV5942
			40	10A	80.0W†		CV5949
0.7	0.5	6	32	50	250		CV5951
			40	25	100		CV5967
			80		660		CV5970
			45	50	400		CV5974
			45	50	400		CV5975
10	2	10	15		275		CV5978
			24	250	300		CV5980
			80	15A	80.0W†		CV5994
			25	20	100		CV5995
					60		CV5996
1.5	0.5	16*		75	80		CV7001
			30	350	200		CV7002
				5	27		CV7003
			15	10	27		CV7004
				10	50		CV7005
1.5	0.5	16*	16	125	50		CV7006
			15	125	75		CV7007
			15	75	50		CV7008
			30	500	300		CV7009
				3A	1.0W		CV7011
1.5	0.5	16		3A	1.0W		CV7012
			15	60	45		CV7042
			25	15	250		CV7043
			25	50	250		CV7044
			24	1A	5.0W		CV7054

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I'_{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
CV7056		NPN	13				4.5	1	18		41
CV7057		NPN	13				4.5	1	18		41
CV7058		NPN	13				4.5	1	34		90
CV7059		NPN	17				4.5	10	45†		150†
CV7060		NPN	17				4.5	10	20†		55†
CV7061		NPN	75								
CV7062		NPN	13				10	200	12†		36†
CV7063		NPN	13				10	200	30†		90†
CV7064		NPN	13				10	200	12†		36†
CV7065		NPN	13				10	200	30†		90†
CV7066		NPN	75								
CV7074		PNP	14				6	1	40		80
CV7075		PNP	1/13				6	1	20		80
CV7080		PNP	16								
CV7081		PNP	16								
CV7082		PNP	16								
CV7083		PNP	16								
CV7084		PNP	16								
CV7085		PNP	16								
CV7086		NPN	16								
CV7087		PNP	14								
CV7089		PNP	3				6	1	40		
CV7107		PNP	14				12	1	30		80
CV7111		NPN	1								
CV7112		NPN	1								
CV7115		PNP	16				1.5	1A	30†		90†
CV7116		PNP	16				1.5	1A	30†		90†
CV7117		PNP	1				6	1	10		40
CV7118		PNP	13								
CV7129		PNP	1								
CV7131		NPN	13				6	10	16†		45†
CV7132		NPN	13				6	10	35†		86†
CV7133		NPN	13				6	10	16†		45†
CV7134		NPN	13				6	10	35†		86†
CV7151		PNP	17				6	1	40†		80†
CV7152		PNP	13				6	1	10		40
CV7154		NPN	13				6	10	40†		80†
CV7185		PNP	47				4.5	1	20		100
CV7186		NPN	13				6	0.1	15†		40†
CV7187		NPN	13				6	0.1	30†		70†
CV7188		PNP	1					20	15†		60†
CV7321		PNP	129				0.7	80	30†		90†
CV7326		PNP	36				6	10	40		
CV7327		PNP	36				6	1	60		
CV7328		NPN	13				5	5	80		200
CV7333		NPN	75								
CV7334		NPN	75								
CV7335		PNP	9								
CV7336		NPN	17				5	2	30†		900†
CV7337		NPN	13				1	10	40†		120†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
4.5	1	30*	25		150		CV7056
4.5	1	30*	25		150		CV7057
4.5	1	30*	25		150		CV7058
			20		150		CV7059
			20		150		CV7060
			70	2A	1.6W		CV7061
			60	200	500		CV7062
			100	200	500		CV7063
			60	200	500		CV7064
			100	200	500		CV7065
			60	1.6W			CV7066
			20	1A	150		CV7074
2	0.5	6*	25	15	250		CV7075
			16	10	1.3W		CV7080
			32	10	1.3W		CV7081
			64	10	1.3W		CV7082
				6A	750		CV7083
				6A	750		CV7084
				6A	750		CV7085
				6A	750		CV7086
			10		90		CV7087
6	1	33*	20	10	33		CV7089
4.5	0.5	16*	20	125	80		CV7107
5	1	18*	20	250	145		CV7111
5	1	18*	20	400	145		CV7112
			30	3A	1.0W		CV7115
			60	3A	1.0W		CV7116
2	0.5	16*	60	50	250		CV7117
			16		30		CV7118
			25	20	25		CV7129
6	1	22*	20	50	350		CV7131
6	1	22*	20	50	350		CV7132
6	1	22*	45	50	350		CV7133
6	1	22*	45	50	350		CV7134
2	0.5	6*	32	50	250		CV7151
2	0.5	16*	60	50	250		CV7152
			45	50	300		CV7154
			12		80		CV7185
6	0.1	8*	10	10	50		CV7186
6	0.1	8*	10	10	50		CV7187
			60	250	310		CV7188
1.5	0.5	16*	16	125	50		CV7321
			20	1A	150		CV7326
			20	1A	150		CV7327
			45		400		CV7328
			60	7.5A	65.0W†		CV7333
			100	7.5A	65.0W†		CV7334
			20	10	83		CV7335
			12	200	300		CV7336
			12	200	300		CV7337

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V_{co}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
CV7338		PNP	17				2	10	35†		
CV7339		PNP	13								
CV7340		PNP	13								
CV7341		PNP	17				6	1	20		44
CV7342		PNP	17				6	1	40		88
CV7343		PNP	17				6	1	80		160
CV7344		PNP	17				6	1	15		33
CV7345		PNP	17				6	1	30		66
CV7346		PNP	17				6	1	60		120
CV7347		PNP	1/13				6	1	45		120
CV7348		NPN	17				1	10	20†		
CV7349		NPN	17				1	10	40†		200†
CV7350		NPN	17				1	10	60†		300†
CV7351		NPN	17				1	10	80†		
CV7352		PNP	17				1	10	20†		
CV7353		PNP	17				1	10	40†		200†
CV7354		PNP	17				1	10	60†		300†
CV7355		PNP	17				1	10	80†		
CV7361		NPN	16				9	20	20		
CV7362		NPN	13				9	20	20		
CV7363		PNP	13				6	1	25		60
CV7365		PNP	1/14				5	50	30†		
CV7366		PNP	17	125	100nA	1 μA	6	1	10	15	30
CV7370		PNP	13				0.5	10	30†		
CV7371		NPN	13				6	10	35†		85†
CV7372		NPN	13				6	10	75†		170†
CV7373		NPN	13				6	10	35†		85†
CV7376		PNP	17					300	50†		150†
CV7390		PNP	17				5	2	30		90
CV7391		PNP	17				3	50	25†		75†
CV7392		PNP	1/14				5	50	30†		
CV7393		PNP	13				0.3	10	25†		
CV7394		PNP	13				0.5	10	20†		
CV7396		PNP	17				3	1	30		
CV7404		NPN	17				10	10	40†		
CV7430		NPN	17				0.35	10	20†		60†
CV7431		NPN	17				0.35	10	40†		120†
CV7436		PNP	17				0.2	300	40†		120†
CV7437		PNP	17				0.2	300	30†		250†
CV7438		PNP	17				0.2	50	50†		130†
CV7439		PNP	17				0.2	50	90†		250†
CV7440		NPN	17				5	1	30		100
CV7447		NPN	13				9	10	35		200
CV7448		PNP	17				4.5	1	20		150
CV7451		NPN	17				4	200	20†		60†
CV7452		NPN	17				4	200	20†		60†
CV7453		NPN	17				4	200	35†		100†
CV7454		NPN	17				4	200	35†		100†
CV7455		NPN	17				4	750	20†		60
CV7456		NPN	13				4	750	35†		100†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			15	50	100		CV7338
			25	50	140		CV7339
			15	50	140		CV7340
2	0.5	16*	32	50	250		CV7341
2	0.5	16*	32	50	250		CV7342
2	0.5	16*	32	50	250		CV7343
2	0.5	16*	60	50	250		CV7344
2	0.5	16*	60	50	250		CV7345
2	0.5	16*	60	50	250		CV7346
6	0.5	16*	15	50	250		CV7347
			25	300	150		CV7348
			20	300	150		CV7349
			15	300	150		CV7350
			15	300	150		CV7351
			25	300	150		CV7352
			20	300	150		CV7353
			15	300	150		CV7354
			15	300	150		CV7355
			20	500	3.0W†		CV7361
			20	500	600		CV7362
2	0.5	12*	25	50	250		CV7363
			15	1A	300		CV7365
			125	50	300		CV7366
			10	50	60		CV7370
			45	50	300		CV7371
			45	50	300		CV7372
2	0.5	22*	80	50	300		CV7373
			32	500	240		CV7376
			15	20	100		CV7390
			15	50	300		CV7391
			20	1A	300		CV7392
				50	150		CV7393
				50	150		CV7394
10	0.3	12*	12	10	50		CV7396
			80		800		CV7404
			15	100	300		CV7430
			15	100	300		CV7431
			40	500	240		CV7436
			40	500	240		CV7437
			32	500	240		CV7438
			32	500	240		CV7439
					800		CV7440
			20	100	300		CV7447
			6		200		CV7448
			40	1.5A	5.0W†		CV7451
			55	1.5A	5.0W†		CV7452
			40	1.5A	5.0W†		CV7453
			55	1.5A	5.0W†		CV7454
			40	3A	25.0W†		CV7455
			55	3A	25.0W†		CV7456

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	Vce	TYP μA	MAX μA	Vce	Ic mA	MIN	TYP	MAX
CV7457		NPN	13				4	750	20†		60†
CV7458		NPN	13				4	750	35†		100†
CV7459		PNP	17					20	25†		100†
CV7460		PNP	16								
CV7461		NPN	13				5	5	40		100
CV7462		PNP	13				0.5	50 μA	10†		
CV7463		PNP	13				0.5	50 μA	20†		
CV7464		NPN	13				1	10	20†		60†
CV7477		NPN	13								
CV7478		NPN	9				1	3	20†		150†
CV7479		NPN	25				5	1	40†		120†
CV7480		NPN	16				4	1.5A	15†		45†
CV7481		NPN	16				4	1.5A	15†		45†
CV7482		NPN	16				4	1.5A	25†		75†
CV7483		NPN	16				4	1.5A	25†		75†
CV7484		PNP	13				1	10	25†		50†
CV7485		PNP	13				1	10	40†		80†
CV7486		PNP	13				1	10	25†		50†
CV7487		PNP	13				1	10	40†		80†
CV7488		PNP	13				1	10	75†		150†
CV7489		PNP	13				1	10	25†		100†
CV7490		NPN	17				9	10	35		180
CV7491		NPN	17				9	10	35		180
CV7492		NPN	13	5		2mA	5	1	60		
CV7493		NPN	17	5		2mA	5	1	150		
CV7494		PNP	16				0.2	1A	25†		75†
CV7495		NPN	17								
CV7496		NPN	17								
CV7527		NPN	16				4	1.5A	15†		45†
CV7528		NPN	16				4	1.5A	15†		45†
CV7529		NPN	16				4	1.5A	25†		75†
CV7530		NPN	16				4	1.5A	25†		75†
CV7554		NPN	13				0.4	20	30†		150
CV7555		NPN	13								
CV7580		PNP	17				5	1	15		50
CV7581		PNP	17				5	1	25		100
CV7588		NPN	13				5	5	80		200
CV7593		NPN	17								
CV7594		PNP	13								
CV7595		PNP	13								
CV7596		NPN	13				5	5	40†		100†
CV7597		PNP	17								
CV7598		PNP	17				5	1	10		40
CV7602		PNP	17				6	10	50†		200†
CV7603		PNP	17				6	10	50†		200†
CV7604		PNP	17				6	10	50†		200†
CV7605		NPN	13				1	10	50†		200†
CV7606		PNP	25								
CV7607		PNP	25								
CV7608		PNP	25								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	3A	25.0W†		CV7457
			55	3A	25.0W†		CV7458
			55	3A	25.0W†		CV7459
			60	750	4.5W†		CV7460
			45	50	400		CV7461
			20	100	300		CV7462
			20	100	300		CV7463
			15	200	300		CV7464
			45		360		CV7477
			15	50	200		CV7478
			60		600		CV7479
			40	6A	75.0W†		CV7480
			55	6A	75.0W†		CV7481
			40	6A	75.0W†		CV7482
			55	6A	75.0W†		CV7483
			30		400		CV7484
			30		300		CV7485
			40		300		CV7486
			40		300		CV7487
			30		300		CV7488
			50		300		CV7489
			24	100	600		CV7490
			24	100	600		CV7491
5	10μA	4*	45	30	300		CV7492
5	10μA	3*	45	30	300		CV7493
				8A	38.0W†		CV7494
			40		800		CV7495
			40		800		CV7496
			40	6A	75.0W†		CV7527
			55	6A	75.0W†		CV7528
			40	6A	75.0W†		CV7529
			55	6A	75.0W†		CV7530
			6		300		CV7554
			15		360		CV7555
			35		600		CV7580
			35		600		CV7581
			45	50	400		CV7588
			20		600		CV7593
			12	200	360		CV7594
			20	200	360		CV7595
			45	50	400		CV7596
			12	50	60		CV7597
			80	100	300		CV7598
			20	500	300		CV7602
			35	500	300		CV7603
			45	500	300		CV7604
			25		680		CV7605
			40	15A	45.0W†		CV7606
			60	15A	45.0W†		CV7607
			60	15A	100.0W†		CV7608

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
CV7627		NPN	157				1	10	30†		60†
CV7628		NPN	157				1	10	40†		120†
CV7629		NPN	75	32		10mA					
CV7630		PNP	17								
CV7637		PNP	17				6	1	80		160
CV7638		PNP	17				6	1	60		120
CV7647		PNP	13	40		10μA	6	1	15		35
CV8004		PNP	7/18				1.5	200	20	24	30
CV8015		NPN	13				10	25		25	
CV8111		PNP	24				4.5	50	40†	60†	90†
CV8119		NPN	17				5	1		150	
CV8126		PNP	13				4.5	1	50	150	
CV8130		PNP	13				1	300	40†		120†
CV8150		PNP	17				6	1	45		100
CV8252		PNP	1	15	2μA	10μA		10	40†	80†	
CV8259		PNP	17				6	1		80	
CV8276		PNP	7/18				1.5	200	20	24	30
CV8288		PNP	47				4.5	1	20	60	150
CV8314		PNP	1	6	200μA	600μA	5.4	10	45†		330†
CV8315		PNP	1/29				6	1	40		180
CV8316		PNP	1/29				6	1	25		125
CV8319		PNP	17				0.3	10	20†		
CV8322		PNP	16				1.5	100		35†	
CV8333		NPN	9				20	15	15	50	200
CV8335		PNP	16				1.5	1A	40†		
CV8341		PNP	16				2	400		180	
CV8342		PNP	16				1	1A	20†		55†
CV8343		PNP	1				6	1	40	100	225
CV8344		PNP	1	4.5	150μA	325μA	2	3	30	47	75
CV8345		NPN	1					15		75	
CV8346		PNP	1	6	200μA	600μA	5.4	10	45†		330†
CV8347		PNP	1				6	1	20	30	80
CV8348		PNP	1				6	1	10	15	
CV8349		PNP	1	10		300μA					
CV8354		PNP	3				6	1	20	100	200
CV8355		PNP	16				2	400		180	
CV8356		PNP	16				1	1A	45†		130†
CV8358		PNP	13				3	0.5		155	
CV8359		PNP	13				6	1	90	160	
CV8360		NPN	13				6	10	38	60	82
CV8361		PNP	13				0.3	10	25†	40†	
CV8362		PNP	24				6	1	30	55	80
CV8363		PNP	36				6	1	60	100	160
CV8366		PNP	42				1.5	1A		45†	
CV8368		PNP	16				1.5	100		35	
CV8369		PNP	16				2	500		70†	
CV8370		NPN	13				5	10	45†	80†	150†
CV8371		NPN	13				3	0.5	40	155	
CV8372		PNP	13				6	1	45	130	
CV8373		NPN	13				10	25		25	

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			12	40	80		CV7627
			12	40	80		CV7628
			32	7.5A	65.0W†		CV7629
			25	500	360		CV7630
			32	150	350		CV7637
			60	150	350		CV7638
			40	50	300		CV7647
			30	3A	1.0W†		CV8004
			100	200	4.0W†		CV8015
			40	350	440		CV8111
5	1	4	25	300	150		CV8119
			20	500	75		CV8126
2	0.5	3	30	1A	240		CV8130
2	0.5	3	10	100	100		CV8150
			15	50	43		CV8252
2	0.5	3	20	1A	240		CV8259
			30	3A	1.0W†		CV8276
0.2	0.5	2.5	5		200		CV8288
2	0.5	15*	32	125	75		CV8314
9	2	15*		5	27		CV8315
9	2	15*	15	10	27		CV8316
			7	100	150		CV8319
			40	10A	80.0W†		CV8322
			60	50	500		CV8333
			60	6A	50.0W†		CV8335
			24	1A	15.0W†		CV8341
			60	6A	12.0W†		CV8342
			10	5	75		CV8343
3	0.5	10	20	10	125		CV8344
5	1	25*	20	200	100		CV8345
2	0.5	15*	60	125	75		CV8346
3.5	0.5	6	25	50	250		CV8347
3	0.5	8	60	50	250		CV8348
			25	10	25		CV8349
6	1	18	20	10	60		CV8354
			24	1A	4.0W†		CV8355
			48	6A	30.0W†		CV8356
			6	50	25		CV8358
			15	200	75		CV8359
			45	50	350		CV8360
				50	150		CV8361
3	0.5	7	20	250	200		CV8362
2	0.5	7	30	1A	200		CV8363
			64	12A	20.0W†		CV8366
			60	10A	80.0W†		CV8368
			80	3A	15.0W†		CV8369
			20		125		CV8370
			20	200	150		CV8371
			15	100	75		CV8372
			100	200	4.0W†		CV8373

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		V _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
CV8385		NPN	17								
CV8386		PNP	6				1.5	20	20	40	100
CV8393		PNP	13	80		10 μ A	6	1	10		40
CV8396		NPN	34								
CV8397		NPN	17				1	10	82†		
CV8398		PNP	17				6	1	100		200
CV8399		PNP	17				0.5	10	80†		
CV8439		PNP	25				2	5A	25†		50†
CV8400		PNP	16				1.5	100		35†	
CV8440		PNP	1	6	125 μ A	300 μ A	6	8		50	
CV8447		PNP	1				6	1	15	20	60
CV8448		PNP	16				2	400		180	
CV8451		NPN	13				10	25		50	
CV8453		NPN	13				5	1	18	25	41
CV8455		NPN	13				5	1	18	25	41
CV8467		NPN	17	5		2nA	5	1	150	350	600
CV8473		PNP	13	15		10 μ A	6	1	45	75	120
CV8480		PNP	16				1	1A	30†		110†
CV8484		NPN	73	90	10 μ A	50 μ A	5	10	20†	50†	
CV8498		NPN	67				2	500	25†		
CV8499		NPN	67				2	500	25†		
CV8500		PNP	13	80		10 μ A	6	1	10	18	30
CV8501		PNP	16				1.5	1A	50†		150†
CV8516		PNP	17				6	0.1	30†		60†
CV8519		PNP	1				6	0.2	25		80
CV8520		PNP	1				6	0.2	25		80
CV8521		PNP	1				6	0.2	25		80
CV8522		PNP	1				6	1	20		80
CV8524		PNP	1				6	1	10		40
CV8527		PNP	1				6	1	10		40
CV8528		NPN	17				10	20	12†		36†
CV8529		PNP	1				1	1	2.1		
CV8542		NPN	13				5	1	18	38	90
CV8549		PNP	1				6	1	25	35	60
CV8551		PNP	13	125		2 μ A	5	1	10	15	40
CV8555		NPN	17				10	10	25†		
CV8556		NPN	17				10	10	25†		
CV8557		NPN	17				12.6	100	15†		
CV8558		PNP	36				3	1	30	55	80
CV8559		PNP	13				4.5	1	50		200
CV8560		PNP	16				1	1A	20†	35†	55†
CV8565		PNP	13	75	400nA	2 μ A	5	1	10	30	40
CV8568		NPN	17				5	1	40	100	200
CV8582		PNP	1	4.5	60 μ A	350 μ A	4.5	1	30	60	100
CV8591		PNP	17				4	20	25		
CV8592		NPN	17				4	10	50		
CV8593		PNP	16								
CV8600		PNP	13				5	1		70	
CV8601		NPN	17				5	1	15		
CV8602		NPN	17								

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			6		50		CV8385
			15	2A	500		CV8386
			80	100	300		CV8393
			100	7.5A	100.0W†		CV8396
			15	300	150		CV8397
6	1	5*	15	300	150		CV8398
			15	300	150		CV8399
			50	15A	40.0W†		CV8439
			40	10A	80.0W†		CV8400
2	0.5	15*	12	125	125		CV8440
3	0.5	8	25	50	250		CV8447
			24	1A	4.0W†		CV8448
			60	200	4.0W†		CV8451
5	1	20	25		150		CV8453
			40	25	150		CV8455
5	10μA	2	45	30	300		CV8467
2	0.5	5	15	50	300		CV8473
			32	6A	30.0W†		CV8480
			100	750	2.0W†		CV8484
			60	7.5A			CV8498
			200	7.5A			CV8499
2	0.5	6	80	50	300		CV8500
			60	6A	1.3W		CV8501
					150		CV8516
6	0.2	3*	25	15			CV8519
6	0.2	8*	25	15			CV8520
6	0.2	5*	25	15			CV8521
2	0.5	12*	25	15	250		CV8522
2	0.5	16*	60	50	250		CV8524
2	0.5	16*	60	50	250		CV8527
			60	200	800		CV8528
			35	25	15		CV8529
5	1	12	45	25	500		CV8542
2	0.5	6	25	50	250		CV8549
			125	50	660		CV8551
			30		300		CV8555
			30		300		CV8556
			40		800		CV8557
			60	1A	200		CV8558
6	1	15*	30	125	180		CV8559
			16	3.5A	12.5W†		CV8560
			50	50	660		CV8565
			25		360		CV8568
2	0.5	5	9	100	100		CV8582
			15	100	150		CV8591
			15	50	150		CV8592
			40	5A	106.0W†		CV8593
			20	200	150		CV8600
			60	500	500		CV8601
			100		600		CV8602

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
CV8603		NPN	17				5	1	60		
CV8607		PNP	36				3	1	60	100	160
CV8608		NPN	17	20	200nA	3 μ A	2.5	20	21	37	60
CV8609		NPN	34	32	750 μ A	10mA					
CV8611		PNP	13	25		10 μ A	6	1	25	35	75
CV8612		NPN	13	30	5 μ A	50 μ A	10	200	20†	40†	80†
CV8615		NPN	17				0.4	1	30†		
CV8618		PNP	17				6	1	45		
CV8627		NPN	34	60	750 μ A	10mA					
CV8635		PNP	3				6	1		70	
CV8641		PNP	17				6	1	9		220
CV8642		PNP	17				6	1	45		110
CV8643		NPN	13	25	200nA	5 μ A	6	1	15	30	50
CV8645		NPN	17				10	200	12†		36†
CV8646		NPN	17				5	1	18	25	42
CV8647		NPN	17				10	200	65†		200†
CV8653		NPN	17				1.5	50	70		
CV8661		PNP	17				0.5	200	25		
CV8662		PNP	13				0.25	10		35†	
CV8668		PNP	16				2	1A		70†	
CV8673		PNP	16				1.5	100		53†	
CV8677		NPN	17					10		35†	
CV8680		PNP	13				3	1	25†		40†
CV8686		PNP	16				1.5	1A	20†		75†
CV8696		NPN	13	30	5 μ A	50 μ A	10	200	10†	20†	40†
CV8700		PNP	1				0.2	40	20		
CV8702		PNP	13				0.5	20	30†	80†	
CV8710		NPN	17				5	1	30		
CV8712		PNP	9				10	2	10†	33†	
CV8718		PNP	17				6	10	15	35	100
CV8722		PNP	17				3	1	30	80	
CV8724		PNP	1				6	1		90	
CV8725		PNP	16				12	500	50		
CV8728		NPN	13				10	15	10†		50†
CV8729		NPN	17								
CV8756		PNP	3				6	100	50†	140†	
CV8758		NPN	73	50	10 μ A	50 μ A	5	10	20†	50†	
CV8760		PNP	17				6	1	25	35	60
CV8762		PNP	13	40		10 μ A	6	1	15	20	35
CV8765		PNP	13				4.5	1	50		125
CV8775		PNP	25				2	1A	40†	70†	120†
CV8781		NPN	13				10	25	50		
CV8782		PNP	17	15		10 μ A	6	1	45	75	120
CV8783		PNP	13				0.5	10	20†		
CV8789		PNP	16				1.5	1A		130	
CV8792		PNP	16				2	2A	20†		
CV8794		PNP	13				4.5	1	50		150
CV8795		NPN	17								
CV8798		NPN	17				1	10	20†		
CV8799		PNP	17				0.5	10	80†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			35	1A	800		CV8603
2	0.5	5	15	250	200		CV8607
2	0.1	6	20	500	600		CV8608
			32	7.5A	100.0W†		CV8609
2	0.5	8	25	50	300		CV8611
			40	200	600		CV8612
			20	100	300		CV8615
			15		120		CV8618
			60	7.5A	100.0W†		CV8627
			10	10	50		CV8635
2	0.5	5	10	100	120		CV8641
2	0.5	5	10	100	120		CV8642
			25	20	100		CV8643
			60	200	500		CV8645
5	1	20		25	150		CV8646
			100	1A	1.0W		CV8647
			15	150	150		CV8653
			15	500	300		CV8661
				50	60		CV8662
			60	20A	80.0W†		CV8668
			60	20A	80.0W†		CV8673
10	0.3	6*	45	1A	1.0W		CV8677
			10	50	150		CV8680
			60	6A	1.3W		CV8686
			40	200	600		CV8696
			20		200		CV8700
			15	100	100		CV8702
			60		800		CV8710
			20	50	60		CV8712
2	0.5	8	64	250	410		CV8718
			6	10	50		CV8722
2	5	8	20	500	160		CV8724
			20	3A	45.0W†		CV8725
			35		500		CV8728
			20	50	300		CV8729
			32	500	205†		CV8756
			60	750	2.0W†		CV8758
			64	50	250		CV8760
2	0.5	8	40	50	300		CV8762
2	0.5	15*	32	125	200		CV8765
			60	20A	25.0W†		CV8775
			100	200	4.0W†		CV8781
2	0.5	6	15	100	300		CV8782
			12	50	60		CV8783
							CV8789
			20	3A	1.3W		CV8792
6	1	6*	30	125	180		CV8794
			10		360		CV8795
			25	300	150		CV8798
			25	300	150		CV8799

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
CV8800		PNP	13				2	400	40†		120†
CV8801		PNP	13					2A	30†		150†
CV8802		PNP	13				4.5	1	40	150	
CV8803		PNP	16					500		50†	
CV8804		PNP	16				1.5	500	10†	23†	
CV8807		PNP	13				6	1	20	30	80
CV8808		NPN	67				2.5	500	20†		
CV8810		PNP	13					50	50†		200†
CV8817		PNP	72								
CV8818		NPN	75	1mA	30mA	15	1A	20†	35†	60†	
CV8819		NPN	13				0.2	20	30†	50†	75†
CV8828		PNP	16				2	500		115	
CV8830		PNP	13	30	400nA	2 μ A	5	1	10	15	20
CV8831		PNP	13	10	400nA	2 μ A	5	1	10	30	60
CV8832		PNP	13				0.5	10	20†		
CV8837		NPN	13				1.5	50	50†		150†
CV8838		PNP	13				6	1	40		180
CV8841		PNP	17				0.5	20	15†		
CV8842		PNP	17				0.5	20	15†		
CV8843		NPN	17				10	5	35	70	150
CV8844		NPN	13				1	0.5	15†	50†	
CV8845		NPN	102				5	1	40		200
CV8846		PNP	13				5	10	20†		
CV8847		PNP	17								
CV8848		NPN	17				10	5	30		180
CV8849		PNP	13	15		25mA	1	500	18		72
CV8850		PNP	16				1.5	1A	80† Δ		
CV8856		PNP	17				5	1	15		50
CV8857		NPN	67								
CV8863		NPN	16								
CV8864		PNP	13				7	5	20†	45†	
CV8873		PNP	17								
CV8874		NPN	17				5	1	50†		
CV8875		NPN	13				10	150	30†		90†
CV8876		NPN	13				28	100	15†		50†
CV8881		NPN	17	50	10 μ A	50 μ A	5	10	20†	50†	
CV8883		NPN	17								
CV8887		NPN	13				10	25		25	
CV8889		PNP	16				4	4A	20†		70†
CV8890		NPN	17				10	150	50†		250†
CV8891		PNP	13				6	1	25	35	45
CV8894		PNP	1				6	10		40	
CV8899		PNP	16				1.5	1A	40†	120†	
CV8901		NPN	67				12	5A		14	
CV8902		NPN	16				4	500	25†		100†
CV8903		NPN	67				2	500	25†		
CV8909											
CV8910		NPN	34	60	750 μ A	10mA					
CV8911		NPN	13				4	100	20		
CV8913		NPN	17				10	10	35†		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			40	3A	1.0W		CV8800
			40	2A	750		CV8801
			20	500	75		CV8802
			40	3A	45.0W†		CV8803
			100	5A	50.0W†		CV8804
							CV8807
			200	7.5A			CV8808
			20	2A	750		CV8810
			500		3.0W†		CV8817
			60	2A	85.0W†		CV8818
			15	400	120		CV8819
			70	15A	50.0W†		CV8828
			30	50	330		CV8830
			10	50	330		CV8831
			30	18	30		CV8832
			25	300	150		CV8837
2	0.5	22*	10	5	27		CV8838
			20	50	250		CV8841
			65	50	250		CV8842
10.5	0.3	7	40	500	800		CV8843
			20	200	360		CV8844
			60	500	500		CV8845
			18		1.2W		CV8846
			12		360		CV8847
10	0.3	6*	45	1A	1.0W		CV8848
			40	3A	800		CV8849
			40	20A	60.0W†		CV8850
			30	600	600		CV8856
			200	10A	150.0W†		CV8857
			30	1.5A	25.0W†		CV8863
			29	100	120		CV8864
5	50μA	4.5	10		300		CV8873
			30	100	300		CV8874
			30	500	840		CV8875
			40		2.0W†		CV8876
			60	750	800		CV8881
			30		800		CV8883
			60	200	4.0W†		CV8887
			70	15A	115.0W†		CV8889
			40	700	1.0W†		CV8890
			80		330		CV8891
0.7	0.5	6	24	125	300		CV8894
2	0.5	7	40	7A	50.0W†		CV8899
			50	20A	200.0W†		CV8901
			60	4A	25.0W†		CV8902
			30	5A	150.0W†		CV8903
							CV8909
			60	7.5A	100.0W†		CV8910
				1A	5.0W†		CV8911
			30	800	800		CV8913

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I_{co}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
CV8915		NPN	13	9	0.4nA	50nA	9	10	35	110	200
CV8916		NPN	13	9	10nA	100nA	2	10	20†	32†	60†
CV8923		NPN	13				5	1		15	
CV8924		PNP	16				1.5	1A	40†	120†	
CV8925		PNP	16				1.5	1A	40†	120†	
CV8941		NPN	13				4	750	15†		75†
CV8942		PNP	13	25		10 μA	6	1	25		75
CV8950		PNP	17				10	1	25†		100†
CV8966		NPN	1				4.5	3	15†	20†	
CV8967		PNP	13				3	0.5	80	130	200
CV8968		PNP	17				10	1	25†		50†
CV8970		PNP	13	40		10 μA	6	1	15		50
CV8972		NPN	17				10	150	30†		
CV8979		PNP	9				12	1.5	50	90	175
CV8981		PNP	13				10	2	10†	33†	
CV8982		PNP	16				1	1A	15†		80†
CV8989		NPN	17				6	300	50†		200†
CV9000		PNP	66				2	200		135†	
CV9001		PNP	9				6	10	50		
CV9002		PNP	13	15		10 μA	5	100 μA	25†		
CV9017		NPN	13				4	300	20†		80†
CV9020		PNP	9	20		1mA	12	1.5	20		175
CV9029		PNP	17				5	1	15†		50†
CV9031		NPN	17				0.5	50	40†	85†	
CV9033		NPN	16				9	20	20		
CV9035		NPN	75				15	1A	20†	35†	60†
CV9039		PNP	17				6	1	45		
CV9040		NPN	17				0.1	20	50†		150†
CV9047		PNP	17								
CV9048		PNP	17				10	10	25	74	180
CV9052		NPN	17				5	5	35	80	
CV9055		NPN	17				5	1	35	75	100
CV9058		PNP	13	15		10 μA	6	1	45	75	120
CV9059		PNP	17				6	10	30	45	160
CV9064		NPN	17					100	20†		
CV9067		NPN	17				0.35	5	40†		
CV9068		PNP	1				6	1	30		70
CV9069		PNP	17				6	1	45		
CV9070		PNP	17				6	1	45		110
CV9071		PNP	17				6	1	45		
CV9074		NPN	13	9	10nA	100nA	2	10	40†	54†	120†
CV9075		NPN	17				5	1	40	115	200
CV9083		NPN	17				10	10	30†		
CV9088		PNP	16				1.5	1A	40†	120†	
CV9097		PNP	1				6	10	20	40	115
CV9098		PNP	16				1.5	1A	40†	120†	
CV9104		PNP	17				6	1	30		66
CV9106		PNP	1				4.5	1	30	60	100
CV9111		PNP	1	4.5	100 μA	350 μA	4.5	1	50	100	150
CV9114		NPN	17				5	5	40		100

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
5	1	12	30	100	300		CV8915
			15	100	300		CV8916
			25		150		CV8923
			20	7A	50.0W†		CV8924
			30	7A	50.0W†		CV8925
10	2	10	40	3A	15.0W†		CV8941
			20	100	300		CV8942
			50		275		CV8950
			20	200	100		CV8966
			5	1	25*		CV8967
12	2	10	6	40	25		CV8967
			15		275		CV8968
			40	100	300		CV8970
			35	800	800		CV8972
			40	10	120		CV8979
			15	50	60		CV8981
			40	4A	22.0W†		CV8982
			20		800		CV8989
			60	3A			CV9000
			50	50	100		CV9001
			15	50	300		CV9002
			40	2.5A	25.0W†		CV9017
				10	120		CV9020
					300		CV9029
			7	150	150		CV9031
			38	500	3.0W†		CV9033
			60	1A	2.5W		CV9035
			15		120		CV9039
			20	100	125		CV9040
			12	200	360		CV9047
2	0.5	5	25	500	360		CV9048
			35		300		CV9052
			80	500	600		CV9055
			15	50	300		CV9058
			32	250	410		CV9059
2	0.5	8	26	150	250		CV9064
2	0.5	16*	15	100	300		CV9067
					50		CV9068
			10		120		CV9069
			10	100	120		CV9070
			20		120		CV9071
			12	100	300		CV9074
			50		360		CV9075
			80	1A	800		CV9083
			40	7A	50.0W†		CV9088
			32	500	125		CV9097
2	0.5	7					
2	0.5	16*	60	50	250		CV9104
2	0.5	5	25	100	100		CV9106
2	0.5	5	9	100	100		CV9111
			30	50	400		CV9114

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
CV9121		PNP	1				6	1		90	
CV9129		NPN	67				2	500	25†		
CV9130		NPN	13				5	1	30	70	100
CV9131		NPN	126	80			30	100A	20		80
CV9132		NPN	17				10	10	75†		
CV9133		NPN	17	5			0.1nA	1	150	400	900
CV9134		PNP	17				10	1	35†		
CV9157		NPN	102	5			2nA	1	300†		
CV9183		PNP	15				9	1	40	60	90
CV9184		PNP	13				1	100	40†	70†	120†
CV9190		PNP	13				1.5	200	50†		
CV9192		PNP	17				10	1	100†		
CV9195		PNP	16				4	4A	20†		70†
CV9206		PNP	17				10	2		55	
CV9209		NPN	13				10	25		25	
CV9211		NPN	17								
CV9212		NPN	17	20			10 μ A				
CV9215		NPN	17				0.35	10	50†		200†
CV9216		NPN	16				10	500	40		200
CV9218		NPN	16				4	8A	15†		60†
CV9220		PNP	13				3	1	10†		25†
CV9238		NPN	17				6	200	12†		36†
CV9247		PNP	17				6	1	25	35	60
CV9249		PNP	9				6	1	40†	100†	
CV9250		PNP	16		300 μ A		2	500	25	80	100
CV9251		PNP	13				1	10	40†		150†
CV9255		NPN	17				5	250	10†		
CV9256		NPN	17	30			100nA				
CV9258		PNP	24				6	1	30	55	80
CV9259		PNP	1				6	1		90	
CV9261		NPN	17				5	1		120	
CV9264		PNP	16				1	1A	25†		75†
CV9266		PNP	13				6	1	45		110
CV9267		PNP	17				6	1	90		220

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			32	500			CV9121
			100	5A	150.0W†		CV9129
			80	500	800		CV9130
			80	2A	1.0W		CV9131
			30	800	800		CV9132
5	10μA	3*	60	50	360		CV9133
			40	600	600		CV9134
5	10μA	3*	45	30	300		CV9157
4.5	0.5	12	20	25	70		CV9183
			40	400	250		CV9184
2	0.5	30*	15	500			CV9190
			60	600	600		CV9192
			70	15A	115.0W†		CV9195
			50		300		CV9206
			100	200	4.0W.		CV9209
			20	100	300		CV9211
			25	100	300		CV9212
			15	100	150		CV9215
			60	7.5A	115.0W†		CV9216
			40	15A	117.0W†		CV9218
				50	150		CV9220
			200	300	600		CV9238
			64	50	250		CV9247
				200	150		CV9249
			50	3A	14.0W†		CV9250
			15	200	150		CV9251
			40	1A	7.0W†		CV9255
			90	25A	75.0W†		CV9256
3	0.5	7	20	250	200		CV9258
2	5	8	20	500	160		CV9259
5	1	4	20	300	150		CV9261
			32	6A	30.0W†		CV9264
				1.5A	200		CV9266
2	0.5	5	10	100	120		CV9267

APPENDIX 2

TEST DATA FOR RUSSIAN TRANSISTORS

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I'_{co}			β				
		TYPE	No.	V_{ce}	TYP μA	MAX μA	V_{ce}	I_c mA	MIN	TYP	MAX
P1A		PNP	91				10	1	9		
P1B		PNP	91				10	1	14		
P1C		PNP	91				10	1	14		25
P1D		PNP	91				10	1	16		
P1E		PNP	91								
P1F		PNP	91				10	1	9		
P1G		PNP	91				10	1	18		
P1H		PNP	91				10	1	24		
P1I		PNP	91				10	1	24		
P1V		PNP	91				10	1	13		
P1YE		PNP	91				10	1	15		
P1ZH		PNP	91				10	1	15		
P2A		PNP	91				10	1	9		
P2B		PNP	91				10	1	9		
P3A		PNP	93				10	150	2		
P3B		PNP	93				10	150	2		
P3C		PNP	93								
P3V		PNP	93				10	150	2		
P4		PNP	93								
P4A		PNP	94				10	2A	5		
P4B		PNP	94				10	2A	15		40
P4C		PNP	94				10	2A	10		
P4D		PNP	94				10	2A	15		30
P4E		PNP	94				1C	2A	30		
P4G		PNP	94								
P4L		PNP	94				26	2A	20		
P4V		PNP	94					5A	10		
P5A		PNP	1				2	1	13	16	48
P5B		PNP	1				2	1	18	18	25
P5C		PNP	1				2	1	33	48	200
P5D		PNP	1				2	1	33	48	200
P5E		PNP	1				2	1	18	33	40
P5G		PNP	1				2	1	32		
P5V		PNP	1				2	1	32		
P5YE		PNP	1				2	1	24		
P6A		PNP	12				5	1	9	12	48
P6B		PNP	12				5	1	9	13	25
P6C		PNP	12				5	1	16	25	48
P6D		PNP	12				5	1	33	48	99
P6E		PNP	12				5	1	13	18	48
P6G		PNP	12				5	1	32		
P6V		PNP	12				5	1	16		
P7		PNP	1				2	1	32		
P8		PNP	12				5	1	9	9	12
P9		PNP	12				5	1	9	12	18
P9A		PNP	12				5	1	12	12	18
P10		PNP	12				5	1	18	18	33
P11		PNP	12				5	1	18	18	48
P12		PNP	5				6	1	18		
P13		PNP	12				5	1	12		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			20	5	50		P1A
1.5	0.5	35	20	5	50		P1B
1.5	0.5	35	20	5	50		P1C
			20	5	50		P1D
		18	20	5	50		P1E
1.5	0.5	35	20	5	50		P1F
1.5	0.5	35	20	5	50		P1G
1.5	0.5	35	20	5	50		P1H
							P1I
							P1V
				5	50		P1YE
				5	50		P1ZH
				10	250		P2A
				25	250		P2B
			50	150	1.0W		P3A
			50	250	1.0W		P3B
			50	450	1.0W		P3C
			50	450	3.0W†		P3V
				2A	10.0W†		P4
			30	5A	2.0W†		P4A
			30	5A	2.0W†		P4B
			20	5A	2.0W†		P4C
			20	5A	2.0W†		P4D
			20	5A	2.0W†		P4E
			30	5A	25.0W†		P4G
				3A	25.0W†		P4L
				5A	25.0W†		P4V
1.0	0.2	12	10	10	25		P5A
1.0	0.2	12	10	10	25		P5B
1.0	0.2	15	10	10	25		P5C
1.0	0.2	10	10	10	25		P5D
1.0	0.2	7	10	10	25		P5E
			10	10	25		P5G
			10	10	25		P5V
			10	10	25		P5YE
5	1	30	10	30	150		76A
5	1	30	15	30	150		P6B
5	1	30	15	30	150		P6C
5	1	30	10	30	150		P6D
5	1	12	15	30	150		P6E
			10	10	150		P6G
			15	10	150		P6V
				45	45		P7
1.5	0.5	15	10	30	150		P8
1.5	0.5	12	15	30	150		P9
1.5	0.5	5	15	30	150		P9A
1.5	0.5	12	15	30	150		P10
1.5	0.5	12	10	30	150		P11
			6	5	30		P12
1.5	0.5	33*		10	150		P13

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
P13A		PNP	12				5	1	33		
P13B		PNP	12				5	1	12		
P14		PNP	12				5	1	18		
P15		PNP	12				5	1	19		
P16		PNP	12						20		
P16A		PNP	12						30		
P16B		PNP	12						45		
P17		PNP							9		
P17A		PNP							16		
P17B		PNP							32		
P18		PNP							9		
P18A		PNP							16		
P18B		PNP	12						32		
P19		PNP	13				5	1	18	27	66
P20		PNP	12					25	50		
P21		PNP	12					25	20		
P21A		PNP	12					25	50		
P25		PNP	12				20	2	10		
P25A		PNP	12						20		
P25B		PNP	12						30		
P26		PNP	12				35	2	10		
P26A		PNP	12						20		
P26B		PNP	12						30		
P27		PNP	13						20		
P27A		PNP	13						20		
P28		PNP	13						20		
P29		PNP	13						25		
P29A		PNP	13						45		
P30		PNP	13						80		
P101		NPN	12				5	1	9	13	24
P101A		NPN	12				5	1	9		
P102		NPN	12				5	1	13	25	50
P103		NPN	12				5	1	9	25	99
P104		PNP	12				5	1	9	13	25
P105		PNP	12				5	1	9	13	25
P106		PNP	12				5	1	9	13	25
P107		NPN							15		
P135		PNP	12				5	1	12		
P201		PNP	95				20	100	20		
P201A		PNP	95				20	100	40		
P202		PNP	95				20	100	20		
P203		PNP	95				20	100	20		
P207		PNP	96				2	10A	15†		30†
P207A		PNP	96				2	10A	17†		40†
P208		PNP	96				2	10A	15†		30†
P208A		PNP	96				2	10A	15†		40†
P209		PNP	97				2	5A	15†		40†
P209A		PNP	97				2	5A	15†		40†
P210		PNP	97				2	5A	15†		40†
P210A		PNP	97				2	5A	15†		40†

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
1.5	0.5	33*		10	150		P13A
1.5	0.5	12*		10	150		P13B
1.5	0.5	33*		10	150		P14
1.5	0.5	33*		10	150		P15
				10	150		P16
				10	150		P16A
				10	150		P16B
				400	300		P17
				400	300		P17A
				400	300		P17B
				400	300		P18
				400	300		P18A
1.0	0.2	5	6	30	30		P18B
				1	150		P19
				1	150		P20
				1	150		P21
				1	150		P21A
				400	200		P25
				400	200		P25A
				400	200		P25B
				400	200		P26
				400	200		P26A
				400	200		P26B
			5	6	30		P27
			5	6	30		P27A
			5	6	30		P28
			10	100	30		P29
			10	100	30		P29A
			10	100	30		P30
1.0	0.2	15	10	20	150		P101
1.0	0.2	15	10	20	150		P101A
1.0	0.2	15	10	20	150		P102
1.0	0.2	15	10	20	150		P103
			60	120	150		P104
			30	20	150		P105
			15	30	150		P106
					150		P107
				10	150		P135
			22	1.5A	1.0W		P201
			22	1.5A	1.0W		P201A
			30	1.5A	1.0W		P202
							P203
			40	25A	4.0W†		P207
			40	25A	4.0W†		P207A
			30	25A	4.0W†		P208
			60	25A	4.0W†		P208A
			40	12A	1.5W		P209
			40	12A	1.5W		P209A
			60	12A	1.5W		P210
			60	12A	1.5W		P210A

Warning: Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I _{co}			β				
		TYPE	No.	V _{ce}	TYP μ A	MAX μ A	V _{ce}	I _c mA	MIN	TYP	MAX
P302		PNP									
P303		PNP									
P303A		PNP									
P304		PNP									
P314A		PNP							16		
P314B		PNP							16		
P314C		PNP							16		
P322		PNP							32		
P401		PNP	12				5	5	16		
P402		PNP	12				5	5	16		
P403		PNP	12				5	5	16		33
P403A		PNP	12				5	5	33		
P404		PNP	48				3	0.5	13		
P404A		PNP	48				3	0.5	13		
P405		PNP	48				3	0.5	18		
P405A		PNP	48				3	0.5	18		
P406		PNP	5				6	1	18		
P407		PNP	5				6	1	18		
P408		PNP	13				5	1	18	66	115
P409		PNP	13				5	1	18	200	900
P410		PNP	92				5	5	27		99
P410A		PNP	92				5	5	99		250
P411		PNP	92				5	5	27		99
P411A		PNP	92				5	5	99		250
P414		PNP	12						25		
P414A		PNP	12						60		
P414B		PNP	12								
P415		PNP	12						25		
P415A		PNP	12						25		
P415B		PNP	12						60		
P416		PNP	92						2.5		
P416A		PNP	92						4.0		
P416B		PNP	92						4.0		
P416V			92								
P501		NPN	92				10	3	9		
P501A		NPN	92				10	3	19		
P502		NPN	92				10	3	9		
P502A		NPN	92				10	3	19		
P502B		NPN	92				10	3	9		
P502V		NPN	92				10	3	19		
P503		NPN	92				10	3	9		
P503A		NPN	92				10	3	19		
P601		PNP							20		
P601A		PNP							40		
P601B		PNP							80		
P602		PNP	13						40		
P602A		PNP	13						80		
P604A		PNP	13						10		
P604B		PNP	13						40		
S1A		PNP					20	1	1		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
			35	1	8.0W†		P302
			60	1	10.0W†		P303
			60	1	10.0W†		P303A
			80	1	10.0W†		P304
			1		100		P314A
			1		100		P314B
			1		100		P314C
			1	15	50		P322
			10	10	100		P401
			10	10	100		P402
			10	10	100		P403
			10	10	100		P403A
			4.5	5	10		P404
			4.5	5	10		P404A
			4.5	5	10		P405
			4.5	5	10		P405A
			6	5	30		P406
			6	5	30		P407
1.0	0.2	5	6	30	30		P408
1.0	0.2	5	6	30	30		P409
			6	20	100		P410
			6	20	100		P410A
			6	20	100		P411
			6	20	100		P411A
				10	100		P414
				10	100		P414A
				10	100		P414B
				10	100		P415
				10	100		P415A
				10	100		P415B
			15	15	100		P416
			15	15	100		P416A
			15	15	100		P416B
			15	15	100		P416V
			20	10	150		P501
			20	10	150		P501A
			20	10	150		P502
			20	10	150		P502A
			20	10	150		P502B
			20	10	150		P502V
			20	10	150		P503
			20	10	150		P503A
			25	1A	1.0W		P601
			25	1A	1.0W		P601A
			25	1A	1.0W		P601B
			25	1A	1.0W		P602
			45	1A	1.0W		P602A
			45	1A	400		P604A
			45	1A	400		P604B
				10	100		S1A

Warning : Reduce base current to zero before connecting transistor

TRANSISTOR	MANUFACTURER	CONNECTIONS		I'_{co}			β				
		TYPE	No.	V _{ce}	TYP μA	MAX μA	V _{ce}	I _c mA	MIN	TYP	MAX
S1B		PNP					20	1	6		
S1D		PNP					20	1	6		
S1G		PNP									
S1V		PNP					20	1	6		
S1YE		PNP					20	1	6		
S2A		PNP					10	1	6		
S2B		PNP					10	1	3		
S2G		PNP					10	1	3		
S2V		PNP					10	1	3		
S3A		PNP	12				20	1	1	4	
S3B		PNP	12				20	1	1		
S3D		PNP	12				20	1	1		
S3G		PNP	12				20	1	1		
S3V		PNP	12				20	1	1		
S3YE		PNP	12				20	1	1		
S4A		PNP	12				10	1	1		
S4B		PNP	12				10	1	1		
S4G		PNP	12				10	1	1		
S4V		PNP	12				10	1	1		

TYPICAL NOISE			MAX. RATINGS			REMARKS	TRANSISTOR
Vce	Ic mA	db	Vce	Ic mA	Pc mW		
				6	50		S1B
				6	50		S1D
				6	50		S1G
				10	100		S1V
				6	50		S1YE
				10	100		S2A
				6	50		S2B
				6	50		S2G
				6	50		S2V
				10	100		S3A
				6	50		S3B
				6	50		S3D
			20	10	70		S3G
				10	100		S3T
							S3V
				6	10		S3YE
				6	100		S4A
				6	50		S4B
				6	50		S4G
				6	50		S4V

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2B2717	TR18	I.R.
2G101	2SA65	TOS
2G102	2SA65	TOS
2G103	2N710	G.E.C.
2G104	2N705	G.E.C.
2G108	2SA65	TOS
2G109	2SA65	TOS
2G138	2SA282	TOS
2G139	2SA283	TOS
2G140	2SA283	TOS
2G141	2SA284	TOS
2G201	2SA65	TOS
2G301	2SA282	TOS
2G301	GET871	G.E.C.
2G301	2GT102	Radiospares
2G301	TR13	I.R.
2G301	ASY57, ACY28	STC
2G301	NKT126	Newmarket
2G301A	2SA277	
2G302	2SA282	TOS
2G302	GET872	G.E.C.
2G302	ASY58	STC
2G302	2GT102	Radiospares
2G302	TR11	I.R.
2G302	NKT125	Newmarket
2G302A	2SA278	TOS
2G303	GET891	G.E.C.
2G303	2SA277	TOS
2G303	ASY54, ACY28	STC
2G304	GET892	G.E.C.
2G304	2SA278	TOS
2G306	GET875	G.E.C.
2G306	TR11	I.R.
2G306	ACY30	STC
2G306	NKT124	Newmarket
2G308	ASY54	STC
2G309	ASY55	STC
2G337	NKT773	Newmarket
2G337	NKT271	Newmarket
2G339	NKT271	Newmarket
2G339	NKT773	Newmarket
2G371	TR15	I.R.
2G371	2GT174	Radiospares

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2G371	ACY28, ASY58	STC
2G371	NKT272	Newmarket
2G371	NKT271	Newmarket
2G371	NKT773	Newmarket
2G374	2GT174	Radiospares
2G374	TR15	I.R.
2G374	ACY30	STC
2G374	NKT274	Newmarket
2G381	NKT773	Newmarket
2G381	2GT182	Radiospares
2G381	TR15	I.R.
2G381	NKT271	Newmarket
2G382	2GT182	Radiospares
2G382	NKT218	Newmarket
2G382	TR15	I.R.
2G386	NKT222S1	Newmarket
2G387	NKT222S2	Newmarket
2G394	2SA283	TOS
2G395	2SA282	TOS
2G396	2SA283	TOS
2G397	2SA284	TOS
2G398	2SB150	TOS
2G401	2SA283	TOS
2G401	NKT677	Newmarket
2G401	NKT612	Newmarket
2G401S	TR17	I.R.
2G402	NKT613	Newmarket
2G402	2SA284	TOS
2G402S	TR18	I.R.
2G403	NKT603	Newmarket
2G413	NKT603	Newmarket
2G414	NKT674	Newmarket
2G414	2GT117	Radiospares
2G415	NKT675	Newmarket
2G415	2GT117	Radiospares
2G416	NKT676	Newmarket
2G416	2GT117	Radiospares
2G417	2GT117	Radiospares
2G417	NKT677	Newmarket
2G508	2SB54	TOS
2N9D	TR14	I.R.
2N25	TR13	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N27
2N27
2N27

2N35
2N35
2N444

G.E.M.
Sylvania
C.B.S.

2N28
2N28
2N28

2N35
2N35
2N444

G.E.M.
Sylvania
C.B.S.

2N29

2N438

C.B.S.

2N34
2N34
2N34
2N34
2N34
2N34
2N34
2N34

2SB44
2N461
TS2, TS14
2SB75
OC72
2N465, TR-43
OC604
TR-05

TOS
Tung Sol
STC(Australia)
Hitachi
Rogers
Industro
Telefunken
I.R.

2N34A
2N34A
2N34A
2N34A
2N34A
2N34A

2SB44
2SB75
OC72
2N34
TR-07
2N465

TOS
Hitachi
Rogers
G.E.M.
I.R.
Industro

2N35
2N35
2N35

2N438A
2SD44
TR-09

C.B.S.
TOS
I.R.

2N36
2N36
2N36
2N36
2N36
2N36
2N36
2N36

TS2, TS13
2SB44
2SB75
2N34
2N34
OC604
OC72
2N465

STC(Australia)
TOS
Hitachi
G.E.M.
Sylvania
Telefunken
Rogers
Industro

2N37
2N37
2N37
2N37
2N37
2N37
2N37
2N37

TS2, TS14
2SB75
2N34
2N34
OC602
2N465
OC72
2SB44

STC(Australia)
Hitachi
Sylvania
G.E.M.
Telefunken
Industro
Rogers
TOS

2N38
2N38
2N38
2N38
2N38
2N38
2N38
2N38

TS1
2SB75
2N464
2N63
2N34
2N34
OC602
OC72

STC(Australia)
Hitachi
Industro
Tung Sol
Sylvania
G.E.M.
Telefunken
Rogers

2N38A
2N38A
2N38A
2N38A
2N38A
2N38A

2SB75
TS1
2N34
2N34
OC602
OC72

Hitachi
STC(Australia)
G.E.M.
Sylvania
Telefunken
Rogers

2N39

OC602

Telefunken

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N40
2N40

OC602
2N464

Telefunken
Industro

2N41
2N41
2N41
2N41
2N41
2N41

TS2, TS14
OC71
2N1008A
2SB183
OC604
2SB90

STC(Australia)
Rogers
Bendix
Hitachi
Telefunken
TOS

2N42

OC602

Telefunken

2N43
2N43
2N43
2N43
2N43
2N43
2N43
2N43
2N43
2N43

TS3, TS13
2N1008B
2SB89
2N34
2N465, TR525
2N461
OC77
OC604SPEC
TR-43

STC(Australia)
Bendix
Hitachi
Sylvania
Industro
Tung Sol
Rogers
Telefunken
Industro

2N43A
2N43A
2N43A
2N43A
2N43A
2N43A
2N43A
2N43A

2SB189
OC604SPEC
TS3, TS13
2N461
OC77
2SB89
2N34
2N1008B

TOS
Telefunken
STC(Australia)
Tung Sol
Rogers
Hitachi
Sylvania
Bendix

2N44
2N44
2N44
2N44
2N44
2N44
2N44
2N44
2N44
2N44

2N1008B
TS1, TS14
2N460
2N34
2SB89
OC74
TR-44
2N464, TR524
OC602SPEC
TR44

Bendix
STC(Australia)
Tung Sol
Sylvania
Hitachi
Rogers
Industro
Industro
Telefunken
Industro

2N44A
2N44A
2N44A
2N44A
2N44A
2N44A

2SB89
TS1, TS14
2N34
2N460
OC74
TR-07

Hitachi
STC(Australia)
Sylvania
Tung Sol
Rogers
I.R.

2N45
2N45
2N45
2N45
2N45
2N45
2N45

TS1
2N34
2SB89
TR45
OC72
OC602SPEC
TR-45

STC(Australia)
Sylvania
Hitachi
Industro
Rogers
Telefunken
Industro

2N46
2N46
2N46
2N46

OC604
2N1008A
OC71
2SB183

Telefunken
Bendix
Rogers
Hitachi

2N47
2N47
2N47
2N47

2N1008A
TS2, TS14
OC71
2SB184

Bendix
STC(Australia)
Rogers
Hitachi

2N48

2N1008A

Bendix

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N48 TS2,TS14 STC(Australia)
 2N48 2SB183 Hitachi
 2N48 OC71 Rogers

2N49 2SB183 Hitachi
 2N49 TS2,TS14 STC(Australia)
 2N49 OC71 Rogers

2N54 2N34 Sylvania
 2N54 2N1008B Bendix
 2N54 2SB75 Hitachi
 2N54 OC72 Rogers
 2N54 2N34 G.E.M.
 2N54 OC602SPEC Telefunken

2N55 2N1008B Bendix
 2N55 OC72 Rogers
 2N55 OC602SPEC Telefunken
 2N55 2N34 Sylvania
 2N55 2N185,TS1,TS14 STC(Australia)
 2N55 2N34 G.E.M.
 2N55 2SB75 Hitachi

2N56 2N34 Sylvania
 2N56 2N1008B Bendix
 2N56 OC602SPEC Telefunken
 2N56 2SB75 Hitachi
 2N56 2N185,TS1 STC(Australia)
 2N56 OC72 Rogers

2N57 2N156 C.B.S.

2N59 2N1008A Bendix
 2N59 OC604SPEC Telefunken
 2N59 2N466,TR-321 Indusro
 2N59 OC74 Rogers
 2N59 2SB89 Hitachi
 2N59 2N383 Tung Sol
 2N59 2N241A Sylvania
 2N59 2N185 STC(Australia)

2N59A 2N1008A Bendix
 2N59A 2N185 STC(Australia)

2N59B 2N1008B Bendix

2N59C 2N1008B Bendix

2N59D TB-05 I.R.

2N60 2N1008A Bendix
 2N60 2SB89 Hitachi
 2N60 OC604SPEC Telefunken
 2N60 TB-320,2N465 Indusro
 2N60 2N185 STC(Australia)
 2N60 2N382 Tung Sol

2N60A 2N1008A Bendix
 2N60A 2N185 STC(Australia)
 2N60A TB-05 I.R.

2N60B 2N1008B Bendix
 2N60B TB-05 I.R.

2N60C 2N1008B Bendix
 2N60C TB-05 I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N61 2N1008A Bendix
 2N61 2N185 STC(Australia)
 2N61 2SB89 Hitachi
 2N61 2N464,2N465 Indusro
 2N61 OC602SPEC Telefunken
 2N61 2N381 Tung Sol

2N61A 2N1008A Bendix
 2N61A 2N185 STC(Australia)

2N61B 2N1008B Bendix

2N61C 2N1008B Bendix

2N62 TS2,TS14 STC(Australia)
 2N62 2SB75 Hitachi
 2N62 OC72 Rogers
 2N62 2N34 Sylvania

2N63 TS1,TS14 STC(Australia)
 2N63 OC602 Telefunken
 2N63 2N1008 Bendix
 2N63 2SB75 Hitachi
 2N63 2N217 Sylvania
 2N63 OC72 Rogers
 2N63 2N464 Indusro

2N64 2N1008 Bendix
 2N64 TS2,TS13 STC(Australia)
 2N64 2N217 Sylvania
 2N64 OC604 Telefunken
 2N64 OC72 Rogers
 2N64 2SB75 Hitachi

2N65 2N1008 Bendix
 2N65 2SB77 Hitachi
 2N65 TS3,TS13 STC(Australia)
 2N65 OC72 Rogers
 2N65 2N65 Tung Sol
 2N65 OC604 Telefunken
 2N65 2N217 Sylvania
 2N65 2N465,2N362 Indusro

2N68 2N156 C.B.S.
 2N68 OD603 Telefunken
 2N68 2SB83 Hitachi

2N71 2N158 C.B.S.
 2N71 OD603 Telefunken

2N73 2N1008B Bendix

2N74 2N1008B Bendix

2N75 2N1008 Bendix

2N76 TS2,TS14 STC(Australia)
 2N76 OC71 Rogers
 2N76 2N1008 Bendix
 2N76 OC602 Telefunken

2N77 2N465 Indusro
 2N77 2SB183 Hitachi
 2N77 TS3,TS13 STC(Australia)
 2N77 OC71 Rogers
 2N77 2N1008A Bendix
 2N77 OC604 Telefunken
 2N77 2N105 RCA

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N77	2SB44	TOS
2N77	TR-04	I.R.
2N78	2SC90	Hitachi
2N78	2N439	C.B.S.
2N78	2N139	Sylvania
2N78	TR-08	I.R.
2N79	2N1008A	Bendix
2N79	TS2,TS13	STC(Australia)
2N79	OC71	Rogers
2N79	OC604	Telefunken
2N79	2SB66	Hitachi
2N80	2SB77	Hitachi
2N80	TS3,TS13	STC(Australia)
2N80	OC604	Telefunken
2N81	2N1008	Bendix
2N81	2SB89	Hitachi
2N81	TS2,TS14	STC(Australia)
2N82	2N1008	Bendix
2N82	TS2,TS14	STC(Australia)
2N82	2SB75	Hitachi
2N82	OC602	Telefunken
2N83	LT5036	C.B.S.
2N83	OD603	Telefunken
2N83A	OD603	Telefunken
2N84	OD603	Telefunken
2N85	2SB75	Hitachi
2N85	OC72	Rogers
2N85	2N34	Sylvania
2N86	2SB75	Hitachi
2N86	2N34	Sylvania
2N86	OC72	Rogers
2N87	2SB75	Hitachi
2N87	2N34	Sylvania
2N87	OC72	Rogers
2N88	OC624	Telefunken
2N88	2SB75	Hitachi
2N88	OC71	Rogers
2N88	2N34	Sylvania
2N89	2SB75	Hitachi
2N89	OC71	Rogers
2N89	OC624	Telefunken
2N90	2SB75	Hitachi
2N90	OC71	Rogers
2N90	OC622	Telefunken
2N91	2SB73	Hitachi
2N92	2SB73	Hitachi
2N94	2N377	C.B.S.
2N94	OC140	Rogers
2N94	OC612	Telefunken

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N94A	2N377	C.B.S.
2N94A	2N94	G.E.M.
2N94A	OC140	Rogers
2N94A	2SC90	Hitachi
2N95	OC603	Telefunken
2N95	LT5210	C.B.S.
2N96	OC602	Telefunken
2N96	TS2,TS14	STC(Australia)
2N96	TS3,TS13	STC(Australia)
2N96	OC71	Rogers
2N96	2SB66	Hitachi
2N97	2SD75	Hitachi
2N97	2N444	C.B.S.
2N97	OC602	Telefunken
2N97	2N169A	Sylvania
2N97A	2N438	C.B.S.
2N97A	2N169A	Sylvania
2N98	2N169A	Sylvania
2N98	2N444	C.B.S.
2N98A	2N444	C.B.S.
2N98A	2N169A	Sylvania
2N99	2N438	C.B.S.
2N99	2N169A	Sylvania
2N100	2N439	C.B.S.
2N101	OD603	Telefunken
2N101	LT5209	C.B.S.
2N101	2SB73	Hitachi
2N102	LT5210	C.B.S.
2N103	2SD75	Hitachi
2N103	OC602	Telefunken
2N104	2N1008A	Bendix
2N104	2SB66	Hitachi
2N104	OC604	Telefunken
2N104	TR-C44	Industro
2N104	2N464, 2N465	Industro
2N104	OC71	Rogers
2N104	2N109	Sylvania
2N104	2N381	Tung Sol
2N104	2SB44	TOS
2N104	TR-04	I.R.
2N104	TR-05	I.R.
2N105	OC71	Rogers
2N105	2N1008A	Bendix
2N105	OC604	Telefunken
2N105	2SB183	Hitachi
2N105	2N465, 2N466	Industro
2N105	TR-04	I.R.
2N105	2N109	Sylvania
2N105	TR-05	I.R.
2N105	2N64	Tung Sol
2N105	M8062B	TOS
2N105	2SB90	TOS
2N106	2SB75	Hitachi
2N106	OC71	Rogers

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N106	TR-04	I.R.
2N106	2N109	Sylvania
2N106	TR-05	I.R.
2N106	2N422	Raytheon
2N106	OC604SPEC	Telefunken
2N107	2N1008	Bendix
2N107	2SB75	Hitachi
2N107	2N34	Sylvania
2N107	TR-05	I.R.
2N107	TR-04	I.R.
2N107	2N63	Tung Sol
2N107	TR-722	Industro
2N107	OC602	Telefunken
2N108	2SB77	Hitachi
2N108	TR-05	I.R.
2N108	OC602	Telefunken
2N109	2N632, 2N362	Industro
2N109	OC72	Rogers
2N109	TR-05	I.R.
2N109	OC604SPEC	Telefunken
2N109	2N1008A	Bendix
2N109	2SB77	Hitachi
2N109	2N382	Tung Sol
2N109	2SB56	TOS
2N111	2SA65	TOS
2N111	OC612	Telefunken
2N111	2N1008A	Bendix
2N111	OC45	Rogers
2N111	2N413	Tung Sol
2N111	2N139	Sylvania
2N111	TR-07	I.R.
2N111	2SA12	Hitachi
2N111	2N413, 2N519	Industro
2N111A	2SA65	TOS
2N111A	2N1008A	Bendix
2N111A	2SA12	Hitachi
2N111A	OC45	Rogers
2N111A	TR-07	I.R.
2N111A	2N139	Sylvania
2N111A	2N413	Tung Sol
2N111A	2N413A, 2N482	Industro
2N112	2SA12	Hitachi
2N112	OC45	Rogers
2N112	OC612	Telefunken
2N112	2N414, CK14	Raytheon
2N112	2N414	Tung Sol
2N112	2N139	Sylvania
2N112	2N414, 2N520	Industro
2N112	2SA65	TOS
2N112	TR-06	I.R.
2N112A	TR-07	I.R.
2N112A	2SA12	Hitachi
2N112A	OC45	Rogers
2N112A	2N414	Tung Sol
2N112A	2N139	Sylvania
2N112A	2N483	Industro
2N112A	2SA65	TOS
2N113	2SA15	Hitachi
2N113	2SA66	TOS
2N113	OC613	Telefunken

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N113	OC45	Rogers
2N113	2N139	Sylvania
2N113	2N416, 2N521	Industro
2N113	2N139	RCA
2N114	2SA17	Hitachi
2N114	OC44	Rogers
2N114	2N139	Sylvania
2N114	2N417, 2N522	Industro
2N114	2N140	RCA
2N114	2N417	Raytheon
2N114	TR-06	I.R.
2N115	OC16	Rogers
2N115	2N234A	Bendix
2N115	2SB83	Hitachi
2N115	OC604	Telefunken
2N115	OC16	Philips
2N116	TR81	Industro
2N116	2SB75	Hitachi
2N116	OC71	Rogers
2N117	OC612	Telefunken
2N118	OC613	Telefunken
2N123	2SA66	TOS
2N123	2SA209	Hitachi
2N123	OC47	Rogers
2N123	2N426	Tung Sol
2N123	OC613	Telefunken
2N123	2N1284, 2N123	Industro
2N123	TR-07	I.R.
2N123	TR123, 2N426	Industro
2N124	2N445	C.B.S.
2N125	2N446	C.B.S.
2N125	2SC90	Hitachi
2N125	TR-10	I.R.
2N126	2SC90	Hitachi
2N126	2N439	C.B.S.
2N127	2N440	C.B.S.
2N128	2SA80	Hitachi
2N128	T1028	Philco
2N128	OC170	Rogers
2N128	2N247	Sylvania
2N128	TR-06	I.R.
2N128	T1548	Philco
2N129	2SA83	Hitachi
2N129	OC170	Rogers
2N129	2N247	Sylvania
2N129	TR-12	I.R.
2N130	2N1008	Bendix
2N130	OC622	Telefunken
2N130	2N63	Tung Sol
2N130	OC71	Rogers
2N130	2SB75	Hitachi
2N130A	2N1008B	Bendix

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N130A	2N381	Tung Sol
2N130A	OC622	Telefunken
2N130A	2SB75	Hitachi
2N130A	TR-05	I.R.
2N130A	TR-04	I.R.
2N130A	2N464	Industro

2N131	OC622	Telefunken
2N131	2N1008	Bendix
2N131	2SB75	Hitachi
2N131	OC71	Rogers
2N131	2N64	Tung Sol

2N131A	TR-05	I.R.
2N131A	2SB44	TOS
2N131A	2N1008B	Bendix
2N131A	2N465	Industro
2N131A	2N381	Tung Sol
2N131A	OC622	Telefunken
2N131A	2SB75	Hitachi
2N131A	TR-04	I.R.

2N132	2N1008	Bendix
2N132	OC624	Telefunken
2N132	2N362	Industro
2N132	OC71	Rogers
2N132	2N241A	Sylvania
2N132	2N65	Tung Sol

2N132A	TR-05	I.R.
2N132A	TR-04	I.R.
2N132A	2N1008A	Bendix
2N132A	2SB77	Hitachi
2N132A	2N466, TR81	Industro
2N132A	2N241A	Sylvania
2N132A	2N383	Tung Sol
2N132A	2SB44	Toshiba

2N133	TR-05	I.R.
2N133	OC71	Rogers
2N133	2N1008	Bendix
2N133	OC623	Telefunken
2N133	2SB73	Hitachi
2N133	2N64	Tung Sol

2N133A	2N382	Tung Sol
2N133A	TR-05	I.R.
2N133A	2N1008A	Bendix
2N133A	2SB73	Hitachi
2N133A	2N465	Industro

2N135	OC45	Rogers
2N135	2N425	Tung Sol
2N135	2N139	Sylvania
2N135	OC612	Telefunken
2N135	2SA12	Hitachi
2N135	2N482, 2N483	Industro
2N135	TR-06	I.R.

2N136	2SA12	Hitachi
2N136	OC612	Telefunken
2N136	2N482, 2N483	Industro
2N136	2N139	RCA
2N136	OC45	Rogers
2N136	2N414	Tung Sol
2N136	2N139	Sylvania
2N136	TR-06	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N137	OC44	Rogers
2N137	2N416	Tung Sol
2N137	2SA15	Hitachi
2N137	OC613	Telefunken
2N137	2N484, 2N485	Industro
2N137	2N140	RCA
2N137	TR-06	I.R.

2N138	OC604	Telefunken
2N138	2N1008	Bendix
2N138	2SB77	Hitachi
2N138	OC72	Rogers
2N138	2N406	Sylvania
2N138	TR-05	I.R.

2N138A	OC72	Rogers
2N138A	2N406	Sylvania
2N138A	2N1008B	Bendix
2N138A	OC604SPBC	Telefunken
2N138A	2SB77	Hitachi
2N138A	TR-05	I.R.

2N138B	2N1008B	Bendix
2N138B	2N631	Raytheon
2N138B	TR-05	I.R.

2N139	OC46	Rogers
2N139	2N414	Tung Sol
2N139	2SA12	Hitachi
2N139	2N482, 2N483	Industro
2N139	OC612	Telefunken
2N139	TR-07	I.R.

2N140	TR-06	I.R.
2N140	2N485, 2N486	Industro
2N140	OC613	Telefunken
2N140	2N1008	Bendix
2N140	2SA15	Hitachi
2N140	2N416	Tung Sol
2N140	OC46	Rogers

2N141	OD603	Telefunken
2N141	LT5201	C.B.S.
2N141	2SB80	Hitachi

2N142	LT5202	C.B.S.
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2N143	LT5201	C.B.S.
2N143	OD603	Telefunken
2N143	2SB80	Hitachi

2N144	LT5202	C.B.S.
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2N145	2N444	C.B.S.
2N145	2N169	Sylvania

2N146	2N169	Sylvania
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2N147	2N168A	Sylvania
2N147	2N444	C.B.S.

2N148	2N377	C.B.S.
2N148	OC45	Rogers
2N148	2N169A	Sylvania

2N148A	2N169A	Sylvania
2N148A	2N438	C.B.S.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N149	2N169A	Sylvania
2N149	TR-05	I.R.
2N149	2N377	C.B.S.
2N149A	2N438	C.B.S.
2N149A	2N169A	Sylvania
2N150	2N377	C.B.S.
2N150	2N169A	Sylvania
2N150A	2N438	C.B.S.
2N150A	2N169A	Sylvania
2N151	TR-05	I.R.
2N155	2N235A	Bendix
2N155	2N1314	Rogers
2N155	2N242	Tung Sol
2N155	CDT-1349	Clevite
2N155	2N257	Clevite
2N155	OD603	Telefunken
2N155	2SB83	Hitachi
2N155	2N301	RCA
2N155	TR-01	I.R.
2N156	2N235A	Bendix
2N156	CDT-1349	Clevite
2N156	2SB84	Hitachi
2N156	OD603	Telefunken
2N156	2N1314	Rogers
2N156	2N156	G.E.M.
2N156	2N242	Tung Sol
2N156	TR-01	I.R.
2N157	2N638A	Bendix
2N157	2N268A	Clevite
2N157	CTP-1730	Clevite
2N157	2SB229	Hitachi
2N157	2N379	Tung Sol
2N157	2N268A	Clevite
2N157	TR-01	I.R.
2N157A	2N638B	Bendix
2N157A	CTP-1730	Clevite
2N157A	CTP-1112	Clevite
2N157A	2N459	Tung Sol
2N157A	TR-01	I.R.
2N158	2N639A	Bendix
2N158	2N377	C.B.S.
2N158	OC28	Rogers
2N158	CTP-1729	Clevite
2N158	2N268A	Clevite
2N158	2N242	Sylvania
2N158	2N379	Tung Sol
2N158	2SB229	Hitachi
2N158A	2N639A	Bendix
2N158A	2N268A	Clevite
2N158A	CTP-1729	Clevite
2N158A	2SB230	Hitachi
2N158A	2N242	Sylvania
2N158A	2N459	Tung Sol
2N164A	TR-08	I.R.
2N164A	2N169A	Sylvania
2N164A	2N446	C.B.S.
2N165	2N446	C.B.S.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N165	2N169A	Sylvania
2N165	TR-10	I.R.
2N166	2N446	C.B.S.
2N166	OC140	Rogers
2N166	2N94A	Sylvania
2N166	TR-10	I.R.
2N167	2N446	C.B.S.
2N167	OC140	Rogers
2N167	2SC90	Hitachi
2N167	2N404	Industro
2N167	2N94A	Sylvania
2N167A	2N94A	Sylvania
2N167A	TR-08	I.R.
2N168	2N445	C.B.S.
2N168	2N292	Sylvania
2N168	TR-10	I.R.
2N168A	2N446	C.B.S.
2N168A	TR-08	I.R.
2N169	2N445	C.B.S.
2N169	TR-10	I.R.
2N169A	2N377	C.B.S.
2N170	2N377	C.B.S.
2N170	2N94A	Sylvania
2N172	2N444	C.B.S.
2N172	2N212	Sylvania
2N173	2N1031A	Bendix
2N173	OC29	Rogers
2N173	TR-03	I.R.
2N173	2N677B	Sylvania
2N173	CTP-1504	Clevite
2N173	HS702	Hitachi
2N173	TR-03	I.R.
2N174	2N1031B	Bendix
2N174	CTP-1503	Clevite
2N174	2N677C	Sylvania
2N174	CTP1503	Clevite
2N174	TR-03	I.R.
2N174	HS702	Hitachi
2N174	TR-03	I.R.
2N174A	2N1031B	Bendix
2N174A	2N677C	Sylvania
2N174A	CTP-1503	Clevite
2N174A	CTP-1501	Clevite
2N174A	HS702	Hitachi
2N175	2SB73	Hitachi
2N175	TR-05	I.R.
2N175	OC71	Rogers
2N175	2N633, 2N632	Industro
2N175	2N65	Tung Sol
2N175	OC604	Telefunken
2N176	TR-01	I.R.
2N176	2N301	C.B.S.
2N176	2N242	Tung Sol
2N176	2N235A	Bendix

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N176	2N1314	Rogers
2N176	2N257	Clevite
2N176	2SB83	Hitachi
2N176	OD603	Telefunken
2N176B	CTP-1137	Clevite
2N176C	2N257	Clevite
2N176G	2N257	Clevite
2N176W	CTP-1137	Clevite
2N177	2N1314	Rogers
2N178	2N234A	Bendix
2N178	2N235A	Sylvania
2N178	2N301	C.B.S.
2N178	2N307	Tung Sol
2N178	CDT-1309	Clevite
2N178	CTP-1105	Clevite
2N178	2SB83	Hitachi
2N178	2N1314	Rogers
2N178	TR-01	I.R.
2N179	2N1008	Bendix
2N179	2N256A	C.B.S.
2N179	2N1314	Rogers
2N179	TR-01	I.R.
2N179	2SB83	Hitachi
2N180	2N1008A	Bendix
2N180	2SB67	Hitachi
2N180	OC72	Rogers
2N180	TR-05	I.R.
2N180	2N270	Sylvania
2N180	TR382, 2N466	Industro
2N180	TR-04	I.R.
2N180	OC604SPEC	Telefunken
2N181	2N1008A	Bendix
2N181	OC74	Rogers
2N181	2SB67	Hitachi
2N181	OC604SPEC	Telefunken
2N181	2N270	Sylvania
2N181	2N382	Industro
2N182	2N404	Industro
2N182	2N419	C.B.S.
2N182	2N94A	Sylvania
2N182	OC140	Rogers
2N183	2N404	Industro
2N183	2N439	C.B.S.
2N183	TR-10	I.R.
2N183	OC140	Rogers
2N184	2N440	C.B.S.
2N184	2N404	Industro
2N184	OC140	Rogers
2N185	2N1008	Bendix
2N185	OC72	Rogers
2N185	2SB77	Hitachi
2N185	2N382	Tung Sol
2N185	2N34	Sylvania
2N185	TR81, TR382	Industro

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N185	2N361, 2N382	Industro
2N185	TR-05	I.R.
2N185	OC604SPEC	Telefunken
2N186	2N1008A	Bendix
2N186	OC72	Rogers
2N186	2SB77	Hitachi
2N186	2N34	Sylvania
2N186	2N381	Tung Sol
2N186	OC602	Telefunken
2N186A	2N1008A	Bendix
2N186A	2SB89	Hitachi
2N186A	2N381	Tung Sol
2N186A	2N270	Sylvania
2N186A	OC602SPEC	Telefunken
2N186A	TR-05	I.R.
2N186A	OC74	Rogers
2N186/A	2N464, 2N633	Industro
2N187	2N1008A	Bendix
2N187	2N381	Tung Sol
2N187	2N34	Sylvania
2N187	2SB77	Hitachi
2N187	2N361, TR-81	Industro
2N187	OC604	Telefunken
2N187	OC72	Rogers
2N187	TR-05	I.R.
2N187A	2SB89	Hitachi
2N187A	2N465, 2N632	Industro
2N187A	2N362, TR-722	Industro
2N187A	2N381	Tung Sol
2N187A	OC604SPEC	Telefunken
2N187A	OC74	Rogers
2N187A	2N1008A	Bendix
2N187A	2N270	Sylvania
2N187A	TR-05	I.R.
2N188	2N1008A	Bendix
2N188	2N382	Tung Sol
2N188	2SB77	Hitachi
2N188	2N34	Sylvania
2N188	OC604	Telefunken
2N188	OC72	Rogers
2N188A	OC604SPEC	Telefunken
2N188A	2N382	Tung Sol
2N188A	2N1008A	Bendix
2N188A	2SB89	Hitachi
2N188A	OC74	Rogers
2N188A	2N270	Sylvania
2N188A	TR-05	I.R.
2N188/A	2N465, 2N632	Industro
2N189	2N1008A	Bendix
2N189	OC71	Rogers
2N189	2N381	Tung Sol
2N189	2SB77	Hitachi
2N189	OC602	Telefunken
2N189	2N34	Sylvania
2N189	2N465	Industro
2N189	TR-05	I.R.
2N198	TR-05	I.R.
2N198	2SB77	Hitachi

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N198	0C602	Telefunken
2N198	0C72	Rogers
2N198	2N217	Sylvania

2N199	2SB77	Hitachi
2N199	0C72	Rogers
2N199	0C602	Telefunken
2N199	2N34	Sylvania
2N199	TR-05	I.R.

2N200	0C71	Rogers
2N200	TR-05	I.R.

2N204	0C71	Rogers
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2N205	0C71	Rogers
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2N206	0C604SPEC	Telefunken
2N206	2N1008A	Bendix
2N206	0C71	Rogers
2N206	2N381	Tung Sol
2N206	2SB66	Hitachi
2N206	2N362, 2N465	Industro
2N206	TR-05	I.R.
2N206	2N331	RCA

2N207	2N362, 2N466	Industro
2N207	2N65	Tung Sol
2N207	0C71	Rogers
2N207	0C604	Telefunken
2N207	2SB184	Hitachi
2N207	T0003	Philco
2N207	TR-05	I.R.

2N207A	2N241A	Sylvania
2N207A	0C71	Rogers
2N207A	2N65	Tung Sol
2N207A	2SB183	Hitachi
2N207A	0C603	Telefunken
2N207A	TR-05	I.R.
2N207A	T0004	Philco

2N207B	2SB183	Hitachi
2N207B	2N65	Tung Sol
2N207B	0C71	Rogers
2N207B	2N241A	Sylvania
2N207B	T0005	Philco
2N207B	TR-05	I.R.
2N207B	0C603	Telefunken
2N207B	2N465	Industro

2N211	TR-10	I.R.
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2N212	2SC91	Hitachi
2N212	TR-09	I.R.

2N213	2N439	C.B.S.
2N213	TR-09	I.R.

2N213A	TR-09	I.R.
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2N214	2N438	C.B.S.
2N214	2SD77	Hitachi
2N214	TR-09	I.R.

2N215	TR-05	I.R.
2N215	0C75	Rogers

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N215	2N1008A	Bendix
2N215	2N34	Sylvania
2N215	0C604	Telefunken
2N215	2SB75	Hitachi
2N215	2N362, 2N465	Industro

2N216	2SC89	Hitachi
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2N217	0C72	Rogers
2N217	TR-05	I.R.
2N217	AC136	A.T.E.S.
2N217	2N382	Tung Sol
2N217	0C604SPEC	Telefunken
2N217	2N1008A	Bendix
2N217	2SB77	Hitachi
2N217	2N632, 2N465	Industro

2N218	0C612	Telefunken
2N218	0C45	Rogers
2N218	2N139	Sylvania
2N218	2N414	Tung Sol
2N218	2SA12	Hitachi
2N218	2N482, 2N483	Industro
2N218	TR-07	I.R.

2N219	2SA15	Hitachi
2N219	2N140	Sylvania
2N219	2N485, 2N486	Industro
2N219	0C613	Telefunken
2N219	2N416	Tung Sol
2N219	0C44	Rogers
2N219	TR-06	I.R.

2N220	0C604	Telefunken
2N220	0C71	Rogers
2N220	2N632, 2N466	Industro
2N220	2N65	Tung Sol
2N220	TR-05	I.R.
2N220	2SB73	Hitachi

2N222	2N34	Sylvania
2N222	2SB75	Hitachi
2N222	2N464	Industro
2N222	TR-05	I.R.

2N223	0C604SPEC	Telefunken
2N223	2N383	Tung Sol
2N223	2N270	Sylvania
2N223	0C74	Rogers
2N223	2N1008	Bendix
2N223	TR-05	I.R.
2N223	2SB89	Hitachi
2N223	2N360, 2N466	Industro

2N224	2N1008A	Bendix
2N224	0C74	Rogers
2N224	2SB89	Hitachi
2N224	TR-05	I.R.
2N224	0C604SPEC	Telefunken
2N224	2N466	Industro
2N224	2N270	Sylvania

2N225	2N1008A	Bendix
2N225	2SB89	Hitachi
2N225	2-0C74	Rogers
2N225	TR-05	I.R.
2N225	2N466	Industro
2N225	2N270	Sylvania
2N225	2X0C604SPEC	Telefunken

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N226	0C74	Rogers
2N226	2N382	Tung Sol
2N226	2SB89	Hitachi
2N226	2N1008A	Bendix
2N226	2N270	Sylvania
2N226	2SB89	Hitachi
2N226	2N465	Industro
2N226	0C604SPEC	Telefunken
2N226	TR-05	I.R.
2N227	TR-05	I.R.
2N227	2N270	Sylvania
2N227	2X0C604SPEC	Telefunken
2N227	2N1008A	Bendix
2N227	2SB89	Hitachi
2N227	2N466	Industro
2N227	2-0C74	Rogers
2N228	2N377	C.B.S.
2N228	2SD77	Hitachi
2N228	TR-09	I.R.
2N229	2N377	C.B.S.
2N229	TR-09	I.R.
2N229	2SD75	Hitachi
2N230	0C29	Rogers
2N231	0C45	
2N231	2SA84	Hitachi
2N231	TR11	I.R.
2N232	0C45	Rogers
2N232	2SA85	Hitachi
2N232	TR12	I.R.
2N232	T1034	Philco
2N233	TR-10	I.R.
2N233	2S090	Hitachi
2N233A	TR-10	I.R.
2N234	TR-01	I.R.
2N234	TR-02	I.R.
2N234	2N234A	Bendix
2N234	2N1314	Rogers
2N234	2N307A	Tung Sol
2N234	2N256A	C.B.S.
2N234	2N242	Sylvania
2N234	CDT-1349	Clevite
2N234	CTP-1104	Clevite
2N234	2SB83	Hitachi
2N234	2N301	RCA
2N234A	CDT-1349	Clevite
2N234A	CTP-1104	Clevite
2N234A	2N1314	Rogers
2N234A	2N256A	C.B.S.
2N234A	2N307A	Tung Sol
2N234A	2N242	Sylvania
2N234A	2SB83	Hitachi
2N234A	2N301	RCA
2N234A	TR-01	I.R.
2N234A	TR-02	I.R.
2N235	TR-01	I.R.
2N235	TR-02	I.R.
2N235	2N235A	C.B.S.

2N235	2N235A	Bendix
2N235	2N242	Tung Sol
2N235	2N1314	Rogers
2N235	2N257	Clevite
2N235	2SB83	Hitachi
2N235	2N301	RCA
2N235A	TR-01	I.R.
2N235A	2N242	Tung Sol
2N235A	2N257G	Clevite
2N235A	2N1314	Rogers
2N235A	2N257	Clevite
2N235A	2SB83	Hitachi
2N235A	2N301	RCA
2N235B	TR-01	I.R.
2N235B	0C35	Rogers
2N235B	2N257B	Clevite
2N235B	2N242	Tung Sol
2N236	2N236B	G.E.M.
2N236	2N1314	Rogers
2N236	2N236A	C.B.S.
2N236	2N236A	Bendix
2N236	2N301	Clevite
2N236	2N242	Tung Sol
2N236	2SB83	Hitachi
2N236	TR-01	I.R.
2N236A	2N301G	Clevite
2N236A	CTP-1117	Clevite
2N236A	2N1314	Rogers
2N236A	2N236B	G.E.M.
2N236A	2N242	Tung Sol
2N236A	2SB83	Hitachi
2N236A	TR-01	I.R.
2N236A	TR-02	I.R.
2N236B	2N301B	Clevite
2N236B	CTP-1117	Clevite
2N236B	0C36	Rogers
2N236B	2SB83	Hitachi
2N236B	2N242	Tung Sol
2N236B	TR-01	I.R.
2N236B	TR-02	I.R.
2N237	0C71	Rogers
2N237	2SB77	Hitachi
2N238	2N217	Sylvania
2N238	0C72	Rogers
2N238	2SB75	Hitachi
2N238	2N465, TR-81	Industro
2N238	TR-05	I.R.
2N238	0C602	Telefunken
2N240	2SA217	Hitachi
2N240	T1038	Philco
2N240	T1788	Philco
2N240	2N217	Sylvania
2N241	2N241A	Sylvania
2N241	2N383	Tung Sol
2N241	0C604SPEC	Telefunken
2N241	2N1008A	Bendix
2N241	2SB77	Hitachi
2N241	2N383	Industro
2N241	0C74	Rogers
2N241	TR-05	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N241A	TR-05	I.R.
2N241A	OC74	Rogers
2N241A	2N1008A	Bendix
2N241A	2N383	Tung Sol
2N241A	2SB89	Hitachi
2N241A	2N466, 2N632	Industro
2N241A	OC604SFEC	Telefunken

2N242	2N235A	Bendix
2N242	2N235A	C.B.S.
2N242	OC35	Rogers
2N242	2N257	Clevite
2N242	2N242	Tung Sol
2N242	2SB84	Hitachi
2N242	2N301A	RCA
2N242	TR-01	I.R.

2N247	2SA80	Hitachi
2N247	OC170	Rogers
2N247	2N417	Industro

2N248	OC170	Rogers
2N248	2SA80	Hitachi
2N248	2N247	Sylvania
2N248	TR17	I.R.

2N249	2N1176A	Bendix
2N249	OC74	Rogers
2N249	OC603	Telefunken
2N249	2SB89	Hitachi
2N249	2N270	Sylvania

2N250	2N235A	Bendix
2N250	2N301	C.B.S.
2N250	2N1314	Rogers
2N250	CDT-1309	Clevite
2N250	2N257	Clevite
2N250	2N242	Tung Sol
2N250	2SB83	Hitachi
2N250	2N301	RCA

2N250A	TR-01	I.R.
2N250A	TR-02	I.R.

2N251	2N639A	Bendix
2N251	2N296	Sylvania
2N251	OC28	Rogers
2N251	2N301A	C.B.S.
2N251	2N268	Clevite
2N251	2N268A	Clevite
2N251	2SB84	Hitachi
2N251	2N301A	RCA

2N251A	TR-01	I.R.
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2N252	OC613	Telefunken
2N252	2SA84	Hitachi
2N252	OC44	Rogers
2N252	2N140	Sylvania
2N252	2N485, 2N486	Industro
2N252	TR-06	I.R.

2N253	2N94A	Sylvania
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2N254	2N94A	Sylvania
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2N255	TR-05	I.R.
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TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N255	2N255A	C.B.S.
2N255	2N307	Tung Sol
2N255	2N1314	Rogers
2N255	CTP-1108	Clevite
2N255	2SB83	Hitachi
2N255	2N301	RCA

2N255A	2N307	Tung Sol
2N255A	CTP-1108	Clevite
2N255A	TR-01	I.R.
2N255A	TR-02	I.R.

2N256	2N256	Bendix
2N256	2N1314	Rogers
2N256	2N307A	Tung Sol
2N256	2N256A	C.B.S.
2N256	CDT-1349	Clevite
2N256	CTP-1104	Clevite
2N256	2SB83	Hitachi
2N256	2N301	RCA
2N256	TR-01	I.R.
2N256	TR-02	I.R.

2N256A	2N307A	Tung Sol
2N256A	CDT-1349	Clevite
2N256A	TR-02	I.R.

2N257	2N235A	Bendix
2N257	NKT404	Newmarket
2N257	2N1314	Rogers
2N257	2N242	Tung Sol
2N257	2SB83	Hitachi
2N257	2N301	RCA
2N257	TR-01	I.R.

2N257B	NKT404	Newmarket
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2N257E	NKT404	Newmarket
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2N257G	NKT404	Newmarket
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2N257V	NKT404	Newmarket
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2N265	2N1008A	Bendix
2N265	2N383	Tung Sol
2N265	OC604	Telefunken
2N265	2SB77	Hitachi
2N265	2N465, TR-508	Industro
2N265	2N465, 2N466	Industro
2N265	OC72	Rogers
2N265	TR-05	I.R.
2N265	2N406	Sylvania

2N266	OC602	Telefunken
2N266	2N1008	Bendix
2N266	TR381, 2N381	Industro
2N266	OC72	Rogers
2N266	TR-05	I.R.

2N267	OC170	Rogers
2N267	2SA80	Hitachi
2N267	2N247	Sylvania

2N268	OC28	Rogers
2N268	2N379	Tung Sol
2N268	LT5072	C.B.S.
2N268	NKT401	Newmarket
2N268	2N639A	Bendix

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N268	2SB228	Hitachi
2N268	2N268A	Clevite
2N268A	OC28	Rogers
2N268A	2N639A	Bendix
2N268A	2N379	Tung Sol
2N268A	LT5075	C.B.S.
2N268A	2N268	Sylvania
2N268A	CDT-1321	Clevite
2N268A	2SB228	Hitachi
2N268A	TR-01	I.R.
2N269	2SA18	Hitachi
2N269	OC47	Rogers
2N269	2N404	Tung Sol
2N269	2N404, TR26	Industro
2N269	NKT125	Newmarket
2N269	TR-07	I.R.
2N270	2GT182	Radiospares
2N270	OC74	Rogers
2N270	OC604SPEC	Telefunken
2N270	2N1008A	Bendix
2N270	2SB89	Hitachi
2N270	2N631, 2N632	Industro
2N270	2N383	Tung Sol
2N270	TR-05	I.R.
2N271	2SA15	Hitachi
2N271	2N486	Industro
2N271	OC44	Rogers
2N271	2N411	Sylvania
2N271	2N416	Tung Sol
2N271	NKT271	Newmarket
2N271A	OC44	Rogers
2N271A	2SA15	Hitachi
2N271A	2N484	Industro
2N271A	2N416	Tung Sol
2N271A	2N139	Sylvania
2N272	2N1008	Bendix
2N272	2SB77	Hitachi
2N273	2N1008A	Bendix
2N273	2SB77	Hitachi
2N273	2N361, TR-81	Industro
2N273	TR-05	I.R.
2N274	OC170	Rogers
2N274	2SA85	Hitachi
2N274	TR-06	I.R.
2N277	TR-03	I.R.
2N277	2N1031	Bendix
2N277	2N677A	Sylvania
2N277	CTP-1508	Clevite
2N277	HS702	Hitachi
2N278	2N1031	Bendix
2N278	CTP-1504	Clevite
2N278	CTP1506	Clevite
2N278	2N677	Sylvania
2N278	HS702	Hitachi
2N278	TR-03	I.R.
2N279	2SB75	Hitachi
2N279	OC70	Rogers

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N279	NKT225	Newmarket
2N279	2N64	Tung Sol
2N279	TR-320	Industro
2N279	2N34	Sylvania
2N279	OC602	Telefunken
2N279	OC70	Philips
2N279	TR-05	I.R.
2N280	2SB75	Hitachi
2N280	NKT224	Newmarket
2N280	2N34	Sylvania
2N280	2N1352	Industro
2N280	2N64	Tung Sol
2N280	OC71	Rogers
2N280	OC604	Telefunken
2N280	OC71	Philips
2N280	TR-05	I.R.
2N281	OC72	Rogers
2N281	2SB77	Hitachi
2N281	2N241A	Sylvania
2N281	TR81	Industro
2N281	NKT222	Newmarket
2N281	OC604SPEC	Telefunken
2N281	OC72	Mullard
2N281	TR-05	I.R.
2N281	OC72	Philips
2N282	2SB77	Hitachi
2N282	2OC72	Rogers
2N282	2N241A	Sylvania
2N282	NKT222	Newmarket
2N282	2XOC604SPEC	Telefunken
2N282	2OC72	Mullard
2N282	2OC72	Philips
2N282	TR-05	I.R.
2N283	2N64	Tung Sol
2N283	OC71	Rogers
2N283	2SB66	Hitachi
2N283	NKT224	Newmarket
2N283	2XOC602	Telefunken
2N283	OC71	Philips
2N284	2SB89	Hitachi
2N284	2N381	Tung Sol
2N284	2XOC602SPEC	Telefunken
2N284	TR-722	Industro
2N284	NKT222	Newmarket
2N284	OC76	Mullard
2N284	OC76	Rogers
2N284	TR-05	I.R.
2N284A	NKT227	Newmarket
2N284A	2SB67	Hitachi
2N284A	OC77	Mullard
2N284A	OC77	Philips
2N284A	OC77	Rogers
2N285	2N1314	Rogers
2N285	2N285A	Bendix
2N285	2N285A	Sylvania
2N285	2N242	Tung Sol
2N285	2N301	Clevite
2N285	CTP-1117	Clevite
2N285	2SB83	Hitachi
2N285	TR-01	I.R.
2N285A	2N285A	Bendix

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N285A	OC36	Rogers
2N285A	2N242	Tung Sol
2N285A	CTP-1117	Clevite
2N285A	2SB83	Hitachi
2N285A	2N301W	Clevite
2N285A	TR-01	I.R.

2N290	CTP-1503	Clevite
2N290	HS702	Hitachi
2N290	2N1031B	Bendix

2N291	2N270	Sylvania
2N291	2N382	Tung Sol
2N291	OC74	Rogers
2N291	2N1176A	Bendix
2N291	2SB89	Hitachi
2N291	TR-05	I.R.
2N291	2N363	Industro

2N292	TR-10	I.R.
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2N292A	2N292	G.E.M.
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2N293	2N216	Sylvania
2N293	TR-10	I.R.

2N296	2N639A	Bendix
2N296	TR-01	I.R.
2N296	CDT-1321	Clevite
2N296	2N459	Tung Sol
2N296	OC28	Rogers
2N296	2N268A	Clevite
2N296	2N157	C.B.S.
2N296	2SB84	Hitachi

2N297	OD603	Telefunken
2N297	2N297A	Bendix
2N297	OC28	Rogers
2N297	2N379	Tung Sol
2N297	2N296	Sylvania
2N297	2N297A	Clevite
2N297	2SB84	Hitachi

2N297A	TR-01	I.R.
2N297A	2N296	Sylvania
2N297A	2N379	Tung Sol
2N297A	OC28	Rogers

2N299	TR-12	I.R.
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2N300	OC171	Rogers
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2N301	2N1314	Rogers
2N301	2N242	Tung Sol
2N301	NKT404	Newmarket
2N301	AD143	A.T.E.S.
2N301	2SB131	Kobe Kogyo
2N301	2N235A	Bendix
2N301	2N257	Clevite
2N301	2SB83	Hitachi
2N301	TR-01	I.R.

2N301A	NKT404	Newmarket
2N301A	AD142	A.T.E.S.
2N301A	2N242	Tung Sol
2N301A	OC28	Rogers
2N301A	2SB132	Kobe Kogyo

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N301A	2N638A	Bendix
2N301A	2N268A	Clevite
2N301A	2SB84	Hitachi
2N301A	TR-01	I.R.

2N302	2N404, TR269	Industro
2N302	OC47	Rogers

2N303	OC47	Rogers
2N303	2N404, TR269	Industro

2N306	TR-09	I.R.
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2N307	2N1314	Rogers
2N307	CDT-1349A	Clevite
2N307	2N256A	C.B.S.
2N307	CTP-1104	Clevite
2N307	2SB83	Hitachi
2N307	2N301	RCA
2N307	TR-01	I.R.
2N307	TR-02	I.R.

2N307A	2N256A	C.B.S.
2N307A	CDT-1349A	Clevite
2N307A	2N257	Clevite
2N307A	2N1314	Rogers
2N307A	2SB83	Hitachi
2N307A	2N301	RCA
2N307A	TR-01	I.R.

2N307B	2N1314	Rogers
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2N308	OC45	Rogers
2N308	2SA83	Hitachi
2N308	2N417	Industro
2N308	OC612	Telefunken
2N308	2N247	Sylvania
2N308	2N247	G.E.M.
2N308	TR-07	I.R.

2N309	TR-07	I.R.
2N309	OC45	Rogers
2N309	OC612	Telefunken
2N309	2N247	Sylvania
2N309	2SA83	Hitachi
2N309	2N417	Industro

2N310	2SA83	Hitachi
2N310	2N465	Industro
2N310	OC45	Rogers
2N310	2N247	Sylvania

2N311	OC47	Rogers
2N311	2N1176	Bendix
2N311	2SA212	Hitachi
2N311	2N404	Sylvania

2N312	OC140	Rogers
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2N313	2N292	Sylvania
2N313	TR-10	I.R.

2N314	2N292	Sylvania
2N314	TR-10	I.R.

2N315	2SA208	Hitachi
2N315	2N404	Sylvania

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N315	OC47	Rogers
2N315	2N426	Tung Sol
2N315	2N315, 2N426	Industro

2N315A	2N404	Sylvania
2N315A	2N426	Tung Sol

2N316	2N404	Sylvania
2N316	2N316, 2N427	Industro
2N316	2N427, 2N1313	Tung Sol
2N316	OC47	Rogers
2N316	2SA209	Hitachi
2N316	2N427	Industro

2N316A	2N404	Sylvania
2N316A	2N427, 2N1313	Tung Sol

2N317	2SA210	Hitachi
2N317	OC47	Rogers
2N317	2N404	Sylvania
2N317	2N317, 2N428	Industro
2N317	2N428, 2N1313	Tung Sol

2N317A	T2173	Philco
2N317A	2N428, 2N1313	Tung Sol
2N317A	2N404	Sylvania

2N318	OCF71	Rogers
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2N319	OC74	Rogers
2N319	2N1008A	Bendix
2N319	2N381	Tung Sol
2N319	TR-319	Industro
2N319	2N270	Sylvania
2N319	2SB89	Hitachi
2N319	TR-05	I.R.

2N320	2SB89	Hitachi
2N320	2N382	Tung Sol
2N320	OC74	Rogers
2N320	2N270	Sylvania
2N320	TR-320	Industro
2N320	TR-05	I.R.

2N321	2SB89	Hitachi
2N321	2N383	Tung Sol
2N321	OC74	Rogers
2N321	TR-321	Industro
2N321	TR-05	I.R.

2N322	2N1008	Bendix
2N322	2N381	Tung Sol
2N322	OC74	Rogers
2N322	OC612	Telefunken
2N322	TR-322, 2N465	Industro
2N322	2N406	Sylvania
2N322	2SB75	Hitachi
2N322	TR-05	I.R.

2N323	2SB77	Hitachi
2N323	OC74	Rogers
2N323	TR-323, 2N466	Industro
2N323	OC612	Telefunken
2N323	2N270	Sylvania
2N323	2N382	Tung Sol
2N323	TR-05	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N324	2N383	Tung Sol
2N324	2N270	Sylvania
2N324	TR-324, 2N466	Industro
2N324	OC74	Rogers
2N324	OC612	Telefunken
2N324	2SB77	Hitachi
2N324	TR-05	I.R.

2N325	2N1291	C.B.S.
2N325	2N242	Tung Sol
2N325	2N235A	Bendix
2N325	2N1314	Rogers
2N325	CDT-1319	Clevite
2N325	2SB83	Hitachi

2N327A	OC200	Rogers
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2N328	OC200	Rogers
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2N328A	OC201	Rogers
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2N331	OC74	Rogers
2N331	2N382	Tung Sol
2N331	2SB89	Hitachi
2N331	2N270	Sylvania
2N331	2N331	Industro
2N331	OC604SPEC	Telefunken
2N331	TR-05	I.R.

2N332	2N2102	RCA
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2N333	2N2102	RCA
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2N334	2N2102	RCA
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2N335	2N2102	RCA
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2N336	2N2102	RCA
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2N337	2N2102	RCA
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2N338	2N2102	RCA
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2N339	2N2102	RCA
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2N340	2N2102	RCA
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2N341	2N2102	RCA
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2N342	2N2102	RCA
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2N343	2N2102	RCA
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2N344	T1224	Philco
2N344	2SA81	Hitachi
2N344	TR17	I.R.

2N345	T1225	Philco
2N345	2SA82	Hitachi

2N346	T1032	Philco
2N346	2SA80	Hitachi
2N346	TR17	I.R.

2N350	2N235A	Bendix
2N350	2N236A	C.B.S.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N350	2N242	Tung Sol
2N350	2N1314	Rogers
2N350	2N301	Clevite
2N350	CTP-1117	Clevite
2N350	2SB83	Hitachi

2N350A	2N301	Clevite
2N350A	2N242	Tung Sol
2N350A	TR-02	I.R.

2N351	2N242	Tung Sol
2N351	2N1314	Rogers
2N351	2N301G	Clevite
2N351	CTP-1117	Clevite
2N351	2SB83	Hitachi
2N351	2N236A	Bendix
2N351	TR-01	I.R.

2N351A	2N242	Tung Sol
2N351A	2N301G	Clevite

2N352	2N235A	Bendix
2N352	2N301B	Clevite
2N352	2N242	Tung Sol
2N352	CTP-1117	Clevite
2N352	2N1314	Rogers
2N352	2SB83	Hitachi
2N352	2N301	RCA
2N352	2N301	C.B.S.
2N352	GET572	G.E.C.
2N352	2N242	Sylvania
2N352	TR-01	I.R.

2N353	LT5099	C.B.S.
2N353	2N242	Tung Sol
2N353	2N1314	Rogers
2N353	2N236A	Bendix
2N353	2N242	Sylvania
2N353	2N301B	Clevite
2N353	CTP-1117	Clevite
2N353	GET572	G.E.C.
2N353	2SB63	Hitachi
2N353	2N301	RCA
2N353	TR-01	I.R.

2N354	OC201	Rogers
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2N356	OC139	Rogers
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2N357	OC140	Rogers
2N357	2SC90	Hitachi
2N357	2N426	Industro

2N358	2N427	Industro
2N358	OC141	Rogers

2N359	OC72	Rogers
2N359	OC604SPEC	Telefunken
2N359	TR-05	I.R.
2N359	2N359, 2N631	Industro

2N360	OC604SPEC	Telefunken
2N360	OC72	Rogers
2N360	2N360, 2N632	Industro
2N360	TR-05	I.R.

2N361	TR-05	I.R.
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TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N361	OC72	Rogers
2N361	2N361, 2N633	Industro
2N361	OC604SPEC	Telefunken

2N362	2N383	Tung Sol
2N362	2SB77	Hitachi
2N362	TR-05	I.R.

2N363	OC71	Rogers
2N363	2SB75	Hitachi
2N363	2N382	Tung Sol
2N363	TR-05	I.R.
2N363	OC604SPEC	Telefunken

2N364	TR-09	I.R.
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2N367	2N381	Tung Sol
2N367	2N1176A	Bendix
2N367	OC602	Telefunken
2N367	TR-34	Industro
2N367	2SB75	Hitachi

2N368	2N1176A	Bendix
2N368	2N382	Tung Sol
2N368	OC602	Telefunken
2N368	TR-722	Industro
2N368	2SB75	Hitachi
2N368	2N109	Sylvania

2N369	2N1176A	Bendix
2N369	OC604	Telefunken
2N369	2N422	Industro
2N369	2N383	Tung Sol
2N369	2SB75	Hitachi
2N369	2N109	Sylvania

2N370	2SA350	Hitachi
2N370	2SA80	Hitachi
2N370	OC170	Rogers
2N370	TR-01	I.R.

2N371	2SA81	Hitachi
2N371	OC170	Rogers
2N371	TR17	I.R.

2N372	OC170	Rogers
2N372	TR17	I.R.
2N372	2SA82	Hitachi

2N373	2SA83	Hitachi
2N373	TR-07	I.R.

2N374	2SA84	Hitachi
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2N375	2N639B	Bendix
2N375	OC28	Rogers
2N375	2N459	Tung Sol
2N375	2N296	Sylvania
2N375	LT5108	C.B.S.
2N375	CDT-1321	Clevite
2N375	CTP-1112	Clevite
2N375	2SB228	Hitachi

2N376	2N236B	Bendix
2N376	2N236B	Sylvania
2N376	2N1314	Rogers
2N376	2N301B	Clevite

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N376	2N242	Tung Sol
2N376	CTP-1117	Clevite
2N376	2SB83	Hitachi

2N376A	2N236B	Bendix
2N376A	2N236B	Sylvania
2N376A	2N301B	Clevite
2N376A	2N242	Tung Sol
2N376A	TR-01	I.R.

2N378	OC35	Rogers
2N378	2N301	C.B.S.
2N378	2N242	Sylvania
2N378	2N639	Bendix
2N378	CDT-1319	Clevite
2N378	2N257	Clevite
2N378	2SB83	Hitachi
2N378	TR-01	I.R.

2N379	2N638	Bendix
2N379	2N297A	C.B.S.
2N379	2N296	Sylvania
2N379	CDT-1321	Clevite
2N379	2N268A	Clevite
2N379	2SB228	Hitachi
2N379	OC28	Rogers

2N380	OC28	Rogers
2N380	2N296	Sylvania
2N380	2N637	Bendix
2N380	CDT-1320	Clevite
2N380	2N297A	C.B.S.
2N380	2N268A	Clevite
2N380	2SB84	Hitachi

2N381	OC604SPEC	Telefunken
2N381	OC74	Rogers
2N381	2N1008A	Bendix
2N381	2SB89	Hitachi
2N381	2N381, TR-722	Industro
2N381	TR381, TR320	Industro

2N382	OC604SPEC	Telefunken
2N382	TR382, TR321	Industro
2N382	2N382, 2N363	Industro
2N382	OC74	Rogers
2N382	2N1008A	Bendix
2N382	2SB89	Hitachi

2N383	OC604SPEC	Telefunken
2N383	2N383, 2N466	Industro
2N383	2N1008A	Bendix
2N383	TR383, TR321	Industro
2N383	OC74	Rogers
2N383	TR-05	I.R.
2N383	2SB89	Hitachi

2N384	2SA234	Hitachi
2N384	OC171	Rogers

2N385	TR-10	I.R.
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2N386	OC28	Rogers
2N386	2N296	Sylvania
2N386	LT5066	C.B.S.
2N386	2N380	Tung Sol
2N386	2N638A	Bendix
2N386	CDT-1320	Clevite

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N386	2N268A	Clevite
2N386	GET573	G.E.C.
2N386	2SB84	Hitachi

2N387	OC29	Rogers
2N387	2N638B	Bendix
2N387	2N379	Tung Sol
2N387	CDT-1321	Clevite
2N287	LT5075	C.B.S.
2N387	CTP-1112	Clevite
2N387	2SB228	Hitachi

2N388A	TR-09	I.R.
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2N391	2SB84	Hitachi
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2N392	2N1137	Bendix
2N392	CDT-1311	Clevite
2N392	2SB228	Hitachi
2N392	2N297A	C.B.S.

2N393	T1166	Philco
2N393	OC170	Rogers
2N393	T1866	Philco

2N394	2N1353, 2N394	Industro
2N394	2N404, 2N520	Industro
2N394	2N404	Sylvania
2N394	OC80	Rogers
2N394	2N425	Tung Sol
2N394	2SA211	Hitachi
2N394	TR-07	I.R.

2N395	2N1354, 2N395	Industro
2N395	2N404, 2N427	Industro
2N395	2N404	Sylvania
2N395	OC46	Rogers
2N395	2SA212	Hitachi
2N395	T2172	Philco
2N395	2N426	Tung Sol
2N395	TR-06	I.R.

2N396	2N1355, 2N396	Industro
2N396	TR396, 2N427	Industro
2N396	2N404	Sylvania
2N396	OC46	Rogers
2N396	2N426, 2N1313	Tung Sol
2N396	2SA212	Hitachi

2N396A	T1902	Philco
2N396A	2N1356	Industro
2N396A	TR-05	I.R.

2N397	2N404	Sylvania
2N397	OC47	Rogers
2N397	2N427, 2N1313	Tung Sol
2N397	2N1357	Industro
2N397	TR397, 2N316	Industro
2N397	2SA217	Hitachi

2N398	2SB68	Hitachi
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2N399	2N257B	Clevite
2N399	2N301	C.B.S.
2N399	2N242	Tung Sol
2N399	2N1314	Rogers
2N399	CTP-1137	Clevite
2N399	TR-01	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
2N400	2N257V	Clevite
2N400	2N242	Tung Sol
2N400	2N350	Sylvania
2N400	2N236B	C.B.S.
2N400	CTP-1137	Clevite
2N400	TR-01	I.R.
2N400	2SB83	Hitachi
2N401	2N257	Clevite
2N401	TR-01	I.R.
2N401	2N301	C.B.S.
2N401	2N1314	Rogers
2N401	2N242	Tung Sol
2N401	2SB83	Hitachi
2N402	OC602SPEC	Telefunken
2N402	TR-722	Industro
2N402	2N1008A	Bendix
2N402	2N381	Tung Sol
2N402	OC71	Rogers
2N402	2SB89	Hitachi
2N402	TR-05	I.R.
2N403	2N1008A	Bendix
2N403	2SB89	Hitachi
2N403	OC602SPEC	Telefunken
2N403	2N381	Tung Sol
2N403	2N139	Sylvania
2N403	OC74	Rogers
2N403	2N465, 2N363	Industro
2N403	TR-05	I.R.
2N404	2SA212	Hitachi
2N404	T1903	Philco
2N404	T3003	Philco
2N404	TR-05	I.R.
2N405	TR-05	I.R.
2N405	2N1008	Bendix
2N405	OC604SPEC	Telefunken
2N405	2N362, 2N363	Industro
2N405	2SB75	Hitachi
2N405	2N382	Tung Sol
2N405	OC72	Rogers
2N406	OC604SPEC	Telefunken
2N406	2N362, 2N363	Industro
2N406	AC134	A.T.E.S.
2N406	2N1008	Bendix
2N406	OC72	Rogers
2N406	2N382	Tung Sol
2N406	2SB75	Hitachi
2N406	TR-05	I.R.
2N407	OC72	Rogers
2N407	OC604SPEC	Telefunken
2N407	2N633, 2N632	Industro
2N407	2N1008	Bendix
2N407	2SB77	Hitachi
2N407	2N383	Tung Sol
2N407	TR-05	I.R.
2N408	AC135	A.T.E.S.
2N408	OC72	Rogers
2N408	OC604SPEC	Telefunken
2N408	2N633, 2N632	Industro
2N408	2N1008	Bendix
2N408	2N383	Tung Sol

TRANSISTOR	SUBSTITUTE	MANUFACTURER
2N408	2SB77	Hitachi
2N408	TR-05	I.R.
2N409	2N482, 2N483	Industro
2N409	OC45	Rogers
2N409	OC612	Telefunken
2N409	2SA12	Hitachi
2N409	2N414	Tung Sol
2N409	TR-06	I.R.
2N410	OC45	Rogers
2N410	2SA12	Hitachi
2N410	OC612	Telefunken
2N410	2N482, 2N483	Industro
2N410	2N414	Tung Sol
2N410	TR-06	I.R.
2N411	2N485, 2N486	Industro
2N411	2SA15	Hitachi
2N411	OC44	Rogers
2N411	2N416	Tung Sol
2N411	OC613	Telefunken
2N411	TR-06	I.R.
2N412	TR-06	I.R.
2N412	OC613	Telefunken
2N412	2SA15	Hitachi
2N412	2N416	Tung Sol
2N412	2N485, 2N486	Industro
2N412	OC44	Rogers
2N413	2N413	Industro
2N413	2SA208	Hitachi
2N413	TR-07	I.R.
2N413A	OC45	Rogers
2N413A	TR-07	I.R.
2N414	2SA209	Hitachi
2N414	2N414A	G.E.M.
2N414	TR-07	I.R.
2N414A	OC45	Rogers
2N414A	2SA209	Hitachi
2N414A	TR-06	I.R.
2N414B	TR-06	I.R.
2N415	2N521	Industro
2N415	2SA210	Hitachi
2N415	2N247	Sylvania
2N415	OC44	Rogers
2N415A	2SA210	Hitachi
2N415A	2N416	Industro
2N415A	2N247	Sylvania
2N415A	OC45	Rogers
2N415A	TR-06	I.R.
2N416	OC44	Rogers
2N416	2SA210	Hitachi
2N416	2N247	Sylvania
2N416	TR-07	I.R.
2N417	OC44	Rogers
2N417	2SA210	Hitachi
2N417	TR-07	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N418	CDT-1312	Clevite
2N418	2N296	Sylvania
2N418	2SB230	Hitachi
2N419	LT5063	C.B.S.
2N419	CDT-1319	Clevite
2N419	2N380	Tung Sol
2N419	2SB228	Hitachi
2N419	TR-01	I.R.
2N420	2N420	Bendix
2N420	2N301A	C.B.S.
2N420	CDT-1310	Clevite
2N420	2SB229	Hitachi
2N420	TR-01	I.R.
2N420A	2N420A	Bendix
2N420A	CDT-1312	Clevite
2N422	OC604SPEC	Telefunken
2N422	OC71	Rogers
2N422	2N461	Tung Sol
2N422	2N1008A	Bendix
2N422	TR-05	I.R.
2N422	2SB73	Hitachi
2N425	2SA212	Hitachi
2N425	OC47	Rogers
2N425	2N1303	Raytheon
2N425	TR-07	I.R.
2N426	2SA208	Hitachi
2N426	OC47	Rogers
2N426	2N1305	Raytheon
2N426	TR-07	I.R.
2N427	2N427, 2N1313	Tung Sol
2N427	2N1307	Raytheon
2N427	2SA209	Hitachi
2N427	OC74	Rogers
2N427	TR-07	I.R.
2N428	OC47	Rogers
2N428	2N428, 2N1313	Tung Sol
2N428	TR-07	I.R.
2N428	T1904	Philco
2N428	2N1309	Raytheon
2N428M	T3004	Philco
2N438	OC612	Telefunken
2N438A	TR-10	I.R.
2N439	OC612	Telefunken
2N439A	TR-10	I.R.
2N440	OC613	Telefunken
2N440A	TR-10	I.R.
2N441	2N1031	Bendix
2N441	CTP-1508	Clevite
2N441	CTP-1509	Clevite
2N441	2N677	Sylvania
2N441	TR-03	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N442	TR-03	I.R.
2N442	2N1031	Bendix
2N442	CTP-1504	Clevite
2N442	CTP-1507	Clevite
2N442	2N677	Sylvania
2N443	2N1031A	Bendix
2N443	TR-03	I.R.
2N443	OC29	Rogers
2N443	2N677B	Sylvania
2N443	CTP-1504	Clevite
2N443	CTP-1505	Clevite
2N444A	2N377	C.B.S.
2N445A	2N377	C.B.S.
2N446A	2N385	C.B.S.
2N447A	2N388	C.B.S.
2N448	TR-10	I.R.
2N449	TR-10	I.R.
2N450	TR-06	I.R.
2N450	2N416, 2N1347	Industro
2N450	2N426	Tung Sol
2N456	2N301	C.B.S.
2N456	2N1136	Bendix
2N456	NKT402	Newmarket
2N456	2N296	Sylvania
2N456	CDT-1310	Clevite
2N456	CTP-1137	Clevite
2N456	2SB84	Hitachi
2N456	TR-01	I.R.
2N456A	CDT-1310	Clevite
2N457	TR-01	I.R.
2N457	2N1136	Bendix
2N457	2N296	Sylvania
2N457	2N443	C.B.S.
2N457	CDT-1311	Clevite
2N457	2N268A	Clevite
2N457	2SB228	Hitachi
2N457	NKT401	Newmarket
2N457A	CDT-1311	Clevite
2N457A	2PGT7	Radiospares
2N458	2N1136A	Bendix
2N458	CDT-1312	Clevite
2N458	2N174	C.B.S.
2N458	2SB229	Hitachi
2N458	NKT401	Newmarket
2N458A	CDT-1312	Clevite
2N459	LT5117	C.B.S.
2N459	2N1136B	Bendix
2N459	2N459	Tung Sol
2N459	CDT-1322	Clevite
2N459	CTP-1112	Clevite
2N460	TR460, 2N1451	Industro

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N460	2N1008B	Bendix
2N460	2SB89	Hitachi
2N461	OC80	Rogers
2N461	2N1008B	Bendix
2N461	TR461, TR320	Industro
2N461	2N1452	Industro
2N461	2SB89	Hitachi
2N461	TR-05	I.R.
2N462	2SB89	Hitachi
2N462	TR-05	I.R.
2N463	2N297A	C.B.S.
2N463	CDT-1320	Clevite
2N464	2N460	Tung Sol
2N464	2N1008B	Bendix
2N464	OC71	Rogers
2N464	2SB89	Hitachi
2N464	2N524	Raytheon
2N464	TR-05	I.R.
2N465	2N1008B	Bendix
2N465	OC71	Rogers
2N465	2SB89	Hitachi
2N465	2N525	Raytheon
2N465	2N461	Tung Sol
2N465	TR-05	I.R.
2N466	2N383	Tung Sol
2N466	2N241A	Sylvania
2N466	2N1008A	Bendix
2N466	OC75	Rogers
2N466	2SB89	Hitachi
2N466	TR-05	I.R.
2N466	2N526	Raytheon
2N467	2N1008A	Bendix
2N467	OC75	Rogers
2N467	2SB89	Hitachi
2N467	2N527	Raytheon
2N467	TR-05	I.R.
2N468	2N1294	C.B.S.
2N470	2N2102	RCA
2N471	2N2102	RCA
2N472	2N2102	RCA
2N473	2N2102	RCA
2N474	2N2102	RCA
2N475	2N2102	RCA
2N476	2N2102	RCA
2N477	2N2102	RCA
2N478	2N2102	RCA
2N479	2N2102	RCA

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N480	2N2102	RCA
2N481	2SA12	Hitachi
2N481	TR-06	I.R.
2N481	2N413	Tung Sol
2N482	2SA12	Hitachi
2N482	2N414	Tung Sol
2N482	TR-07	I.R.
2N483	2SA12	Hitachi
2N483	TR-07	I.R.
2N484	2SA12	Hitachi
2N484	TR-07	I.R.
2N484	2N416	Tung Sol
2N485	2SA15	Hitachi
2N485	TR-06	I.R.
2N485	2N414	Tung Sol
2N486	TR-06	I.R.
2N486	2SA15	Hitachi
2N487	2SA14	Hitachi
2N495	T1275	Philco
2N495	OC201	Rogers
2N496	OC201	Rogers
2N496	T1276	Philco
2N497	2N2102	RCA
2N498	2N2102	RCA
2N499	T1789	Philco
2N499	OC171	Rogers
2N499	TR18	I.R.
2N499	T3008	Philco
2N499A	T3006	Philco
2N500	TR18	I.R.
2N501	TR18	I.R.
2N501	T1312	Philco
2N501A	T1510	Philco
2N502	T1342	Philco
2N502	TR18	I.R.
2N502A	T3009	Philco
2N502A	TR18	I.R.
2N503	TR18	I.R.
2N503	T1322	Philco
2N504	T1314	Philco
2N504	TR17	I.R.
2N506	2SB77	Hitachi
2N508	2SB77	Hitachi
2N508	2N383	Tung Sol

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N508 2N383 Tung Sol
2N508 TR-05 I.R.

2N511 2N441 C.B.S.
2N511 CTP-1508 Clevite
2N511 GET572 G.E.C.
2N511 2N441 Tung Sol

2N511A 2N443 C.B.S.
2N511A CTP-1504 Clevite
2N511A GET573 G.E.C.

2N511B CTP-1503 Clevite
2N511F 2N174 C.B.S.

2N512 2N443 Tung Sol
2N512 2N277 C.B.S.
2N512 CTP-1508 Clevite

2N512A CTP-1504 Clevite
2N512A 2N278 C.B.S.

2N512B CTP-1503 Clevite
2N512B 2N1099 C.B.S.

2N513 CTP-1552 Clevite

2N513A CTP-1544 Clevite

2N513B CTP-1545 Clevite

2N514 CTP-1552 Clevite

2N514A CTP-1544 Clevite

2N514B CTP-1545 Clevite

2N515 TR-10 I.R.
2N515 2N445 C.B.S.

2N516 2N445 C.B.S.
2N516 TR-10 I.R.

2N517 2N445 C.B.S.
2N517 TR-10 I.R.

2N518 2SA212 Hitachi
2N518 2N427, 2N1313 Tung Sol
2N518 2N416 Industro

2N519 2N1008 Bendix
2N519 2SA208 Hitachi
2N519 2N413 Tung Sol

2N519A 2N413 Tung Sol

2N520 2SA208 Hitachi
2N520 2N426 Industro
2N520 2N414 Tung Sol
2N520 TR-06 I.R.

2N520A 2N414 Tung Sol
2N520A 2N426 Industro

2N521 2SA209 Hitachi

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2N521 2N416 Tung Sol
2N521 2N427 Industro

2N521A 2N416 Tung Sol
2N521A 2N427 Industro

2N522 2SA210 Hitachi
2N522 2N417 Tung Sol
2N522 2N428 Industro

2N522A 2N417 Tung Sol
2N522A 2N428 Industro

2N523 2SA210 Hitachi

2N524 2SB89 Hitachi
2N524 2N460 Tung Sol
2N524 2N1446 Industro
2N524 TR-05 I.R.

2N525 2SB89 Hitachi
2N525 2N461 Tung Sol
2N525 TR525, 2N1447 Industro
2N525 TR-05 I.R.

2N526 2SB89 Hitachi
2N526 TR526, 2N1448 Industro
2N526 TR-05 I.R.

2N527 2SB89 Hitachi
2N527 TR527, 2N1449 Industro
2N527 TR-05 I.R.

2N534 T0031 Philco

2N535 2SB184 Hitachi
2N535 T0033 Philco

2N535A T0015 Philco

2N535B T0014 Philco

2N536 2SB184 Hitachi
2N536 T0012 Philco

2N537 HS106 Hitachi

2N538 LT5130 C.B.S.
2N538 2N637B Bendix
2N538 CDT-1321 Clevite
2N538 2N1314 Rogers
2N538 2N268A Clevite
2N538 2SB228 Hitachi

2N538A 2N637B Bendix
2N538A LT5131 C.B.S.
2N538A CDT-1321 Clevite
2N538A 2N268A Clevite
2N538A 2SB228 Hitachi

2N539 LT5125 C.B.S.
2N539 2N637B Bendix
2N539 OC28 Rogers
2N539 CDT-1321 Clevite
2N539 2SB228 Hitachi

2N539A 2N637B Bendix

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N539A	LT5126	C.B.S.
2N539A	CDT-1321	Clevite
2N539A	2SB228	Hitachi

2N540	2N1136A	Bendix
2N540	LT5133	C.B.S.
2N540	CDT-1312	Clevite
2N540	2N1314	Rogers
2N540	2SB228	Hitachi

2N540A	LT5134	C.B.S.
2N540A	2N1136A	Bendix
2N540A	CDT-1312	Clevite
2N540A	2SB228	Hitachi

2N544	2SA85	Hitachi
2N544	OC170	Rogers

2N553	2N639A	Bendix
2N553	2N297A	C.B.S.
2N553	CST-1761	Clevite
2N553	2SB228	Hitachi

2N554	TR-01	I.R.
2N554	2N234A	Bendix
2N554	CDT-1349	Clevite
2N554	2N255A	C.B.S.
2N554	CTP-1104	Clevite
2N554	TR-02	I.R.
2N554	2N1314	Rogers
2N554	2N307	Tung Sol
2N554	2N301	RCA

2N555	2N235A	Bendix
2N555	2N256A	C.B.S.
2N555	TR-01	I.R.
2N555	TR-02	I.R.
2N555	2N242	Tung Sol
2N555	CDT-1349	Clevite
2N555	2N1314	Rogers
2N555	2N235A	Sylvania
2N555	2N257	Clevite
2N555	2SB83	Hitachi

2N557	2N556	C.B.S.
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2N559	HS106	Hitachi
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2N561	LT5111	C.B.S.
2N561	2N1136A	Bendix
2N561	CDT-1321	Clevite
2N561	OC29	Rogers
2N561	NKT403	Newmarket
2N561	2SB229	Hitachi

2N563	2N1008A	Bendix
2N563	2N381	Tung Sol
2N563	2SB75	Hitachi
2N563	2N564	Industro

2N564	2N1008A	Bendix
2N564	2N381	Tung Sol
2N564	2SB75	Hitachi

2N565	2N1008A	Bendix
2N565	2N381	Tung Sol
2N565	2SB75	Hitachi

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N566	2N1008A	Bendix
2N566	2N381	Tung Sol
2N566	2SB75	Hitachi

2N567	2N1008A	Bendix
2N567	2SB77	Hitachi
2N567	2N382	Tung Sol
2N567	2N568	Industro

2N568	2N1008A	Bendix
2N568	2N382	Tung Sol
2N568	2SB77	Hitachi

2N569	2SB77	Hitachi
2N569	2N383	Tung Sol
2N569	2N570	Industro

2N570	2SB77	Hitachi
2N570	2N383	Tung Sol

2N571	2SB77	Hitachi
2N571	2N572	Industro

2N572	2SB77	Hitachi
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2N573	TR-05	I.R.
2N573	TR-04	I.R.

2N574	2N1031A	Bendix
2N574	2N173	Tung Sol
2N574	CTP-1505	Clevite
2N574	2N174	C.B.S.
2N574	2N677B	Sylvania
2N574	CTP-1551	Clevite

2N574A	OC28	Rogers
2N574A	2N174	C.B.S.
2N574A	2N174	Tung Sol
2N574A	2N1031B	Bendix
2N574A	CTP-1551	Clevite
2N574A	2N677C	Sylvania
2N574A	CTP-1503	Clevite

2N575	CTP-1544	Clevite
2N575	2N173	Tung Sol
2N575	2N1099	C.B.S.
2N575	2N677B	Sylvania
2N575	CTP-1504	Clevite
2N575	OC28	Rogers

2N575A	CTP-1545	Clevite
2N575A	2N174	Tung Sol
2N575A	CTP-1512	Clevite
2N575A	2N1099	C.B.S.
2N575A	2N677C	Sylvania
2N575A	OC29	Rogers

2N576	2SC90	Hitachi
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2N577	OCF71	Rogers
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2N578	2SA208	Hitachi
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2N579	NKT125	Newmarket
2N579	2SA209	Hitachi

2N580	2SA210	Hitachi
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TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N580	NKT124	Newmarket
2N580	2N580, 2N1313	Tung Sol
2N581	2SA211	Hitachi
2N581	2N581, 2N1313	Tung Sol
2N581	TR-07	I.R.
2N582	2N522	Industro
2N582	2SA217	Hitachi
2N582	2N581, 2N1313	Tung Sol
2N582	TR-07	I.R.
2N583	TR-07	I.R.
2N583	2SA41	Hitachi
2N583	NKT125	Newmarket
2N584	NKT124	Newmarket
2N584	2SA18	Hitachi
2N584	TR-07	I.R.
2N585	OC139	Rogers
2N585	2N438	C.B.S.
2N585	TR-10	I.R.
2N585	NKT126	Newmarket
2N585	2SC89	Hitachi
2N586	NKT227	Newmarket
2N586	2N1008B	Bendix
2N586	TR-05	I.R.
2N587	2N385	C.B.S.
2N587	TR-09	I.R.
2N588	TR18	I.R.
2N588	T1250	Philco
2N589	2SB83	Hitachi
2N589	2N459	Tung Sol
2N589	CTP-1112	Clevite
2N591	2SB77	Hitachi
2N591	2N382	Tung Sol
2N591	TR-04	I.R.
2N591	TR-05	I.R.
2N592	2N1008	Bendix
2N593	2N1008	Bendix
2N594	2N1008	Bendix
2N594	TR-10	I.R.
2N595	TR-10	I.R.
2N596	TR-10	I.R.
2N597	2SA208	Hitachi
2N597	T1334	Philco
2N598	NKT122	Newmarket
2N598	2SA209	Hitachi
2N598	T1326	Philco
2N598	T3005	Philco
2N599	NKT121	Newmarket
2N599	2SA210	Hitachi
2N599	T1346	Philco

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N599M	T2159	Philco
2N600	2SA232	Hitachi
2N600	T1395	Philco
2N600	T2110	Philco
2N601	2SA231	Hitachi
2N601	T1512	Philco
2N602	TR17	I.R.
2N602A	TR17	I.R.
2N603	TR17	I.R.
2N603A	TR17	I.R.
2N604	TR17	I.R.
2N605	TR17	I.R.
2N606	TR17	I.R.
2N607	TR17	I.R.
2N608	TR17	I.R.
2N609	2N1176A	Bendix
2N609	2N383	Tung Sol
2N609	TR-05	I.R.
2N609	2N360	Industro
2N609	2SB89	Hitachi
2N610	2N383	Tung Sol
2N610	2N1176A	Bendix
2N610	TR-05	I.R.
2N610	2N465	Industro
2N610	2SB89	Hitachi
2N611	2N464	Industro
2N611	2N1176A	Bendix
2N611	2N382	Tung Sol
2N611	2SB89	Hitachi
2N611	TR-05	I.R.
2N612	TR-722	Industro
2N612	2N1176A	Bendix
2N612	2N381	Tung Sol
2N612	TR-05	I.R.
2N612	2SB89	Hitachi
2N613	2N1176A	Bendix
2N613	2N381	Tung Sol
2N613	TR-05	I.R.
2N613	2SB89	Hitachi
2N614	2SA12	Hitachi
2N614	2N413	Tung Sol
2N614	TR-07	I.R.
2N615	2SA12	Hitachi
2N615	TR-07	I.R.
2N615	2N414	Tung Sol
2N616	2SA12	Hitachi

TRANSISTOR	SUBSTITUTE	MANUFACTURER
2N616	2N416	Tung Sol
2N616	TR-06	I.R.
2N617	2SA15	Hitachi
2N617	2N414	Tung Sol
2N617	TR-06	I.R.
2N618	LT5111	C.B.S.
2N618	OC28	Rogers
2N618	2N638B	Bendix
2N618	CDT-1312	Clevite
2N618	2N268A	Clevite
2N618	2PGT7	Radiospares
2N624	2SA234	Hitachi
2N624	TR-06	I.R.
2N624	2N417	Tung Sol
2N627	2N677A	Sylvania
2N627	2N441	C.B.S.
2N627	2N441	Tung Sol
2N627	2N1031	Bendix
2N627	CTP-1508	Clevite
2N627	CTP-1514	Clevite
2N628	2N443	C.B.S.
2N628	2N443	Tung Sol
2N628	2N677B	Sylvania
2N628	2N1031A	Bendix
2N628	CTP-1504	Clevite
2N628	CTP-1513	Clevite
2N629	2N174	C.B.S.
2N629	2N174	Tung Sol
2N629	2N1031B	Bendix
2N629	OC29	Rogers
2N629	2N677C	Sylvania
2N629	CTP-1503	Clevite
2N629	CTP-1512	Clevite
2N630	2N1100	C.B.S.
2N630	TR-05	I.R.
2N630	2N1031C	Bendix
2N630	CTP-1500	Clevite
2N630	2N677C	Sylvania
2N630	CTP1516	Clevite
2N630	CTP-1511	Clevite
2N631	TR-05	I.R.
2N631	OC72	Rogers
2N631	2N1176A	Bendix
2N631	2SB77	Hitachi
2N632	2N383	Tung Sol
2N632	2N1176A	Bendix
2N632	2SB77	Hitachi
2N632	TR-05	I.R.
2N632	OC74	Rogers
2N633	TR-05	I.R.
2N633	OC74	Rogers
2N633	2N1176A	Bendix
2N633	2SB77	Hitachi
2N637	2N301	C.B.S.
2N637	2N637	Bendix
2N637	CDT-1319	Clevite

TRANSISTOR	SUBSTITUTE	MANUFACTURER
2N637	CTP-1137	Clevite
2N637	TR-01	I.R.
2N637	2SB83	Hitachi
2N637A	LT5099	C.B.S.
2N637A	2N637A	Bendix
2N637A	CDT-1321	Clevite
2N637A	2N268A	Clevite
2N637A	2SB228	Hitachi
2N637B	LT5108	C.B.S.
2N637B	2N637B	Bendix
2N637B	CDT-1322	Clevite
2N637B	CTP-1112	Clevite
2N637B	2SB229	Hitachi
2N638	2N301	C.B.S.
2N638	TR-01	I.R.
2N638	2N379	Tung Sol
2N638	CDT-1319	Clevite
2N638	2N257	Clevite
2N638	2SB83	Hitachi
2N638A	LT5099	C.B.S.
2N638A	2N459	Tung Sol
2N638A	CDT-1321	Clevite
2N638A	2N268A	Clevite
2N638A	2SB228	Hitachi
2N638B	2N638B	Bendix
2N638B	CDT-1322	Clevite
2N638B	CTP-1112	Clevite
2N638B	2SB229	Hitachi
2N638B	LT5108	C.B.S.
2N639	2N301	C.B.S.
2N639	2N379	Tung Sol
2N639	CDT-1310	Clevite
2N639	2N257	Clevite
2N639	2SB83	Hitachi
2N639	2N1314	Rogers
2N639A	2N459	Tung Sol
2N639A	LT5063	C.B.S.
2N639A	CDT-1312	Clevite
2N639A	OC28	Rogers
2N639A	2N268A	Clevite
2N639A	2SB228	Hitachi
2N639B	LT5072	C.B.S.
2N639B	CDT-1313	Clevite
2N639B	CTP-1112	Clevite
2N639B	2SB229	Hitachi
2N639B	OC28	Rogers
2N640	2SA85	Hitachi
2N640	TR17	I.R.
2N641	2SA83	Hitachi
2N641	TR17	I.R.
2N642	2SA84	Hitachi
2N642	TR17	I.R.
2N643	TR17	I.R.
2N644	2N382	Tung Sol

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N644	TR17	I.R.
2N645	TR17	I.R.
2N647	2SD77	Hitachi
2N647	TR-09	I.R.
2N649	2SD77	Hitachi
2N649	TR-09	I.R.
2N650	2SB89	Hitachi
2N650	2N460	Tung Sol
2N650	TR-650	Industro
2N650	TR-05	I.R.
2N651	2SB89	Hitachi
2N651	2N461	Tung Sol
2N651	TR-05	I.R.
2N652	2SB89	Hitachi
2N652	TR-05	I.R.
2N653	2SB89	Hitachi
2N653	TR-653	Industro
2N653	2N382	Tung Sol
2N653	TR-05	I.R.
2N654	2SB89	Hitachi
2N654	2N383	Tung Sol
2N654	TR-05	I.R.
2N655	2SB89	Hitachi
2N655	TR-05	I.R.
2N656	2N2102	RCA
2N656	2N699	Raytheon
2N657	2N2102	RCA
2N658	OC76	Rogers
2N658	2SA208	Hitachi
2N659	OC76	Rogers
2N659	2SA209	Hitachi
2N660	OC76	Rogers
2N660	2SA210	Hitachi
2N661	2SA210	Hitachi
2N661	OC76	Rogers
2N662	OC76	Rogers
2N662	2SA209	Hitachi
2N663	TR-01	I.R.
2N665	LT5066	C.B.S.
2N665	2N639B	Bendix
2N665	TR-01	I.R.
2N665	CTP-1729	Clevite
2N665	2SB228	Hitachi
2N669	2SB83	Hitachi
2N669	CTD-1319	Clevite
2N669	2N301	C.B.S.
2N669	2N242	Tung Sol
2N669	TR-01	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N670	2N285A	Bendix
2N670	2SB80	Hitachi
2N670	T1347	Philco
2N671	2N285A	Bendix
2N671	2SB80	Hitachi
2N671	T1393	Philco
2N672	2N1031	Bendix
2N672	2SB80	Hitachi
2N672	T1431	Philco
2N673	2SB80	Hitachi
2N673	TT1475	Philco
2N674	2SB228	Hitachi
2N675	2SB80	Hitachi
2N677	2N1031	Bendix
2N677	2N441	C.B.S.
2N677	2N278	Tung Sol
2N677	CTP-1508	Clevite
2N677	CTP-1509	Clevite
2N677A	2N1031A	Bendix
2N677A	CTP-1504	Clevite
2N677A	2N173	Tung Sol
2N677A	2N441	C.B.S.
2N677A	CTP-1505	Clevite
2N677B	2N1031B	Bendix
2N677B	CTP-1503	Clevite
2N677B	2N174	C.B.S.
2N677C	2N174	C.B.S.
2N677C	2N1031C	Bendix
2N677C	CTP-1500	Clevite
2N678	2N1032	Bendix
2N678	2N277	C.B.S.
2N678	2N1146	Clevite
2N678	CTP1514	Clevite
2N678A	2N1032A	Bendix
2N678A	2N1146A	Clevite
2N678A	2N277	C.B.S.
2N678A	CTP-1513	Clevite
2N678B	2N1032B	Bendix
2N678B	2N1146B	Clevite
2N678B	2N173	C.B.S.
2N678B	CTP-1512	Clevite
2N678C	2N1032C	Bendix
2N678C	2N1146C	Clevite
2N678C	2N1099	C.B.S.
2N678C	CTP-1511	Clevite
2N679	2N385	C.B.S.
2N696	2N2102	RCA
2N696	2N697	Raytheon
2N696	2N1613	STC
2N696	ZT696	Ferranti

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N697	2N1711	STC
2N697	2N2102	RCA
2N697	ZT697	Ferranti

2N698	2N2102	RCA
2N698	2N1711	STC
2N698	2N1893	Raytheon

2N699	2N1893	STC
2N699	2N2102	RCA

2N700	TR18	I.R.
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2N700A	TR18	I.R.
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2N701	TR18	I.R.
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2N702	BSY26, 2N706A	STC
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2N703	BSY27, 2N708	STC
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2N705	TR18	I.R.
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2N705A	TR18	I.R.
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2N706	ZT706	Ferranti
2N706	T2478	Philco

2N706A	ZT706A	Ferranti
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2N708	T2888	Philco
2N708	ZT708	Ferranti

2N709	T2876	Philco
2N709	ZT709	Ferranti

2N710	TR18	I.R.
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2N710A	TR18	I.R.
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2N711	TR18	I.R.
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2N711A	TR18	I.R.
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2N711B	TR18	I.R.
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2N715	ZT42	Ferranti
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2N717	2N697	Raytheon
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2N718	2N2102	RCA
2N718	2N697	Raytheon
2N718	BFY26, 2N1893	STC

2N718A	2N1613	Raytheon
2N718A	ZT1613	Ferranti
2N718A	ZT1613	Ferranti

2N719	2N699	Raytheon
2N719	2N1893	STC

2N719A	2N1893	Raytheon
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TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N720	2N2102	RCA
2N720	2N699	Raytheon
2N720	2N1893	STC

2N720A	2N1893	Raytheon
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2N725	TR18	I.R.
2N730	2N2102	RCA
2N731	2N2102	RCA
2N734	2N2102	RCA
2N735	2N2102	RCA
2N736	2N2102	RCA
2N738	2N2102	RCA

2N739	2N2102	RCA
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2N740	2N2102	RCA
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2N741	TR18	I.R.
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2N741A	TR18	I.R.
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2N754	2N1613, BFY25	STC
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2N756	2N706 BFY18	STC
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2N758	2N708, BFY18	STC
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2N768	TR18	I.R.
2N768	T1930	Philco

2N769	T1967	Philco
2N769	TR18	I.R.

2N779	TR18	I.R.
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2N779A	TR18	I.R.
2N779A	T2186	Philco

2N779B	TR18	I.R.
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2N784A	T2826	Philco
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2N794	TR17	I.R.
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2N795	TR17	I.R.
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2N796	TR17	I.R.
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2N828	TR18	I.R.
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2N834	2N708, 2N914	STC
2N834	T2824	Philco

2N835	2N708, 2N914	STC
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2N846	TR18	I.R.
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2N846A	TR18	I.R.
2N846A	T2187	Philco

2N858	T2057	Philco
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TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N859	T2050	Philco
2N860	T2058	Philco
2N861	T2059	Philco
2N862	T2060	Philco
2N863	T2061	Philco
2N864	T2062	Philco
2N865	T2071	Philco
2N870	2N1893	STC
2N870	ZT86	Ferranti
2N871	2N1890	Raytheon
2N871	2N1893	STC
2N909	BFY26	STC
2N914	T2889	Philco
2N914	2N914	Raytheon
2N915	BFY26	STC
2N916	BFY18	STC
2N934	TR18	I.R.
2N947	2N706,BSY27	STC
2N947	ZT41	Ferranti
2N956	ZT1711	Ferranti
2N956	2N1711	Raytheon
2N957	2N708	Raytheon
2N957	ZT43	Ferranti
2N960	TR18	I.R.
2N961	TR18	I.R.
2N966	TR18	I.R.
2N968	TR18	I.R.
2N969	TR-05	I.R.
2N970	TR18	I.R.
2N971	TR18	I.R.
2N972	TR18	I.R.
2N973	TR18	I.R.
2N974	TR18	I.R.
2N975	TR18	I.R.
2N976	T2327	Philco
2N976	TR18	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N977	TR18	I.R.
2N978	TR18	I.R.
2N979	TR18	I.R.
2N982	TR18	I.R.
2N983	TR18	I.R.
2N984	TR18	I.R.
2N985	TR18	I.R.
2N987	TR18	I.R.
2N990	TR18	I.R.
2N991	TR18	I.R.
2N992	TR18	I.R.
2N993	TR18	I.R.
2N994	TR18	I.R.
2N995	ZT1708	Ferranti
2N995	ZT1708	Ferranti
2N1007	2N236A	C.B.S.
2N1007	TR-01	I.R.
2N1008	2SB89	Hitachi
2N1008	TR-05	I.R.
2N1008A	TR-05	I.R.
2N1008B	TR-05	I.R.
2N1010	2SD75	Hitachi
2N1010	TR-09	I.R.
2N1011	2N1011	Bendix
2N1011	2N1011	Clevite
2N1011	2SB228	Hitachi
2N1013	2SB80	Hitachi
2N1014	LT5120	C.B.S.
2N1014	NKT403	Newmarket
2N1014	2N459	Tung Sol
2N1014	CTP-1500	Clevite
2N1014	2SB230	Hitachi
2N1017	2SA210	Hitachi
2N1017	OC47	Rogers
2N1018	2SA210	Hitachi
2N1021	LT5123	C.B.S.
2N1021	2N136B	Bendix
2N1021	TR-01	I.R.
2N1021	CDT-1313	Clevite

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1022	LT5123	C.B.S.
2N1022	TR-01	I.R.
2N1022	2N1136B	Bendix
2N1029	2N1031	Bendix
2N1029	CTP-1508	Clevite
2N1029	2N278	Tung Sol
2N1029	2N441	C.B.S.
2N1029A	2N441	C.B.S.
2N1029A	2N1031A	Bendix
2N1029A	2N173	Tung Sol
2N1029A	CTP-1504	Clevite
2N1029B	2N1031B	Bendix
2N1029B	2N174	C.B.S.
2N1029B	CTP-1503	Clevite
2N1029C	2N1031C	Bendix
2N1029C	2N174	C.B.S.
2N1029C	CTP-1500	Clevite
2N1030	2N1032	Bendix
2N1030	2N277	C.B.S.
2N1030	2N1146	Clevite
2N1030A	2N1032A	Bendix
2N1030A	2N277	C.B.S.
2N1030A	2N1146A	Clevite
2N1030B	2N1032B	Bendix
2N1030B	2N173	C.B.S.
2N1030B	2N1146B	Clevite
2N1030C	2N1032C	Bendix
2N1030C	2N1099	C.B.S.
2N1030C	2N1146C	Clevite
2N1031	2N441	C.B.S.
2N1031	2N278	Tung Sol
2N1031	CTP-3508	Clevite
2N1031A	2N441	C.B.S.
2N1031A	2N173	Tung Sol
2N1031A	CTP-3504	Clevite
2N1031B	2N441	C.B.S.
2N1031B	CTP-3503	Clevite
2N1031C	CTP-3500	Clevite
2N1031C	2N441	C.B.S.
2N1032	2N277	C.B.S.
2N1032	2N1147	Clevite
2N1032A	2N277	C.B.S.
2N1032A	2N1147A	Clevite
2N1032B	2N173	C.B.S.
2N1032B	2N1147B	Clevite
2N1032C	2N1099	C.B.S.
2N1032C	2N1147C	Clevite
2N1038	CTP-1728	Clevite
2N1038	2SB80	Hitachi

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1039	CTP-1735	Clevite
2N1039	2SB80	Hitachi
2N1040	CTP-1729	Clevite
2N1041	CTP-1730	Clevite
2N1042	2N156	C.B.S.
2N1042	CTP-1731	Clevite
2N1042	2SB80	Hitachi
2N1043	2N158	C.B.S.
2N1043	CTP-1736	Clevite
2N1043	2SB80	Hitachi
2N1044	2N158A	C.B.S.
2N1044	CTP-1732	Clevite
2N1045	LT5035	C.B.S.
2N1045	CTP-1733	Clevite
2N1046		C.B.S.
2N1046	CDT-1321	Clevite
2N1046	2SB274	Hitachi
2N1049	2N1613	STC
2N1056	2SB89	Hitachi
2N1057	2SB89	Hitachi
2N1058	TR-08	I.R.
2N1059	2N444	C.B.S.
2N1059	TR-09	I.R.
2N1065	2SA83	Hitachi
2N1073	2N277	Tung Sol
2N1078	CTP-1735	Clevite
2N1078	2SB229	Hitachi
2N1086A	TR-08	I.R.
2N1087	TR-08	I.R.
2N1090	2SC90	Hitachi
2N1091	2SC91	Hitachi
2N1091	NKT125	Newmarket
2N1093	2SA209	Hitachi
2N1097	2SB89	Hitachi
2N1097	2N363	Industro
2N1097	TR-05	I.R.
2N1098	2SB89	Hitachi
2N1098	2N465	Industro
2N1098	TR-05	I.R.
2N1099(GE)	2SB89	Hitachi
2N1099	CTP-1503	Clevite
2N1100	CTP-1500	Clevite

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1101	2N306	C.B.S.
2N1101	TR-09	I.R.
2N1101	TR-09	I.R.
2N1102	2N438A	C.B.S.
2N1102	TR-09	I.R.
2N1107	2SA85	Hitachi
2N1107	TR-06	I.R.
2N1108	2SA85	Hitachi
2N1109	2SA83	Hitachi
2N1110	2SA84	Hitachi
2N1110	TR-06	I.R.
2N1111	2SA84	Hitachi
2N1111	TR-06	I.R.
2N1111A	TR-06	I.R.
2N1111B	TR-06	I.R.
2N1114	2N440A	C.B.S.
2N1115	2N1284	Industro
2N1115	2SA209	Hitachi
2N1118	T1343	Philco
2N1118A	T1501	Philco
2N1119	T1344	Philco
2N1120	2N1099	C.B.S.
2N1121	TR-10	I.R.
2N1122	TR12	I.R.
2N1122	T1327	Philco
2N1122A	T1328	Philco
2N1123	T1537	Philco
2N1124	2N1176B	Bendix
2N1124	2SB89	Hitachi
2N1125	2N1176B	Bendix
2N1125	2SB89	Hitachi
2N1126	2SB80	Hitachi
2N1127	2SB80	Hitachi
2N1128	2N1008A	Bendix
2N1128	2N360	Industro
2N1128	2N383	Tung Sol
2N1128	2SB89	Hitachi
2N1129	2N1176A	Bendix
2N1129	2SB77	Hitachi
2N1130	2N1008A	Bendix
2N1130	2N359	Industro

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1130	2SB77	Hitachi
2N1136	LT5102	C.B.S.
2N1136	2N277	Tung Sol
2N1136	2SB228	Hitachi
2N1136	TR-01	I.R.
2N1136A	LT5111	C.B.S.
2N1136A	TR-01	I.R.
2N1136B	LT5120	C.B.S.
2N1136B	TR-01	I.R.
2N1137	LT5102	C.B.S.
2N1137	2SB228	Hitachi
2N1137A	LT5111	C.B.S.
2N1137A	TR-01	I.R.
2N1137B	LT5120	C.B.S.
2N1137B	TR-01	I.R.
2N1138	TR-01	I.R.
2N1138	2SB228	Hitachi
2N1138A	TR-01	I.R.
2N1138B	TR-01	I.R.
2N1140	2SC151	Hitachi
2N1144	2N363	Industro
2N1144	TR-05	I.R.
2N1144	2SB77	Hitachi
2N1145	2SB77	Hitachi
2N1145	2N465	Industro
2N1146	2N277	C.B.S.
2N1146A	2N278	C.B.S.
2N1146B	2N173	C.B.S.
2N1146C	2N1099	C.B.S.
2N1147	2N277	C.B.S.
2N1147A	2N278	C.B.S.
2N1147B	2N173	C.B.S.
2N1147C	2N1099	C.B.S.
2N1149	2N2102	RCA
2N1150	2N2102	RCA
2N1151	2N2102	RCA
2N1152	2N2102	RCA
2N1153	2N2102	RCA

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1157	CTP-1544	Clevite
2N1157A	CTP-1545	Clevite
2N1158	T1806	Philco
2N1158A	T1895	Philco
2N1159	LT5102	C.B.S.
2N1159	CDT-1312	Clevite
2N1159	2SB228	Hitachi
2N1159	OC29	Rogers
2N1160	2N174	Tung Sol
2N1160	CDT-1312	Clevite
2N1160	2SB228	Hitachi
2N1162	CTP-1544	Clevite
2N1163	CTP-3544	Clevite
2N1164	CTP-1545	Clevite
2N1165	CTP-3545	Clevite
2N1166	CTP-1553	Clevite
2N1167	CTP-3553	Clevite
2N1168	2N1136	Bendix
2N1168	LT5099	C.B.S.
2N1168	OC29	Rogers
2N1168	CDT-1311	Clevite
2N1168	2SB84	Hitachi
2N1171	2SA210	Hitachi
2N1172	CTP-1728	Clevite
2N1172	2SB80	Hitachi
2N1173	TR-09	I.R.
2N1174	TR-09	I.R.
2N1176	2SB89	Hitachi
2N1177	AF164	A.T.E.S.
2N1177	2SA235	Hitachi
2N1177	TR-17	I.R.
2N1178	AF165	A.T.E.S.
2N1178	TR17	I.R.
2N1178	2SA234	Hitachi
2N1179	2SA235	Hitachi
2N1179	TR17	I.R.
2N1180	TR17	I.R.
2N1180	AF166	A.T.E.S.
2N1180	2SA234	Hitachi
2N1183	CTP-1728	Clevite
2N1183	2SB80	Hitachi
2N1183	NKT301	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1183A	NKT301	Newmarket
2N1183A	CTP-1735	Clevite
2N1183A	2SB80	Hitachi
2N1183B	CTP-1729	Clevite
2N1183B	2SB81	Hitachi
2N1183B	NKT302	Newmarket
2N1184	CTP-1728	Clevite
2N1184	NKT301	Newmarket
2N1184	2SB80	Hitachi
2N1184A	NKT301	Newmarket
2N1184A	CTP-1735	Clevite
2N1184A	2SB80	Hitachi
2N1184B	CTP-1729	Clevite
2N1184B	2SB81	Hitachi
2N1184B	NKT301	Newmarket
2N1191	TR-05	I.R.
2N1191	2SB89	Hitachi
2N1192	TR-05	I.R.
2N1192	2SB89	Hitachi
2N1192	2N461	Tung Sol
2N1193	2SB89	Hitachi
2N1195	TR17	I.R.
2N1197	2N1613, 2N1893	STC
2N1198	TR-09	I.R.
2N1202	2N637B	Bendix
2N1202	LT5074	C.B.S.
2N1202	CDT-1321	Clevite
2N1202	2SB229	Hitachi
2N1203	LT5087	C.B.S.
2N1204	T1807	Philco
2N1204A	T2417	Philco
2N1213	TR-06	I.R.
2N1214	TR-06	I.R.
2N1215	TR-06	I.R.
2N1216	TR-06	I.R.
2N1217	TR-08	I.R.
2N1224	TR17	I.R.
2N1224	2SA80	Hitachi
2N1225	2SA235	Hitachi
2N1225	TR17	I.R.
2N1226	TR17	I.R.
2N1226	2SA82	Hitachi

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1245	2N242	Tung Sol
2N1245	CDT-1319	Clevite
2N1245	2SB83	Hitachi

2N1246	CDT-1310	Clevite
2N1246	2SB83	Hitachi
2N1246	2N242	Tung Sol

2N1251	TR-09	I.R.
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2N1252	2N2102	RCA
2N1252	2N697	Raytheon
2N1252	BSY25, 2N223	STC

2N1253	2N2102	RCA
2N1253	2N697	Raytheon
2N1253	BSY95A, 2N2235	STC

2N1261	LT5131	C.B.S.
2N1261	CDT-1320	Clevite
2N1261	2SB228	Hitachi

2N1262	LT5126	C.B.S.
2N1262	CDT-1320	Clevite
2N1262	2SB228	Hitachi

2N1263	LT5134	C.B.S.
2N1263	CDT-1311	Clevite
2N1263	2SB228	Hitachi

2N1264	2SA83	Hitachi
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2N1265	2SB77	Hitachi
2N1265	TR-04	I.R.
2N1265	TR-05	I.R.

2N1266	2SB77	Hitachi
2N1266	TR-07	I.R.

2N1273	TR-C71	Industro
2N1273	2SB75	Hitachi
2N1273	TR-05	I.R.

2N1274	2SB75	Hitachi
2N1274	2N363	Industro

2N1280	2SA208	Hitachi
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2N1281	2SA209	Hitachi
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2N1282	2SA210	Hitachi
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2N1284	2SA208	Hitachi
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2N1287	TR-04	I.R.
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2N1287A	TR-04	I.R.
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2N1291	CTP-1728	Clevite
2N1291	2SB228	Hitachi

2N1293	CTP-1735	Clevite
2N1293	2SB229	Hitachi

2N1295	CTP-1729	Clevite
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TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1295	2SB320	Hitachi
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2N1297	CTP-1730	Clevite
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2N1300	2SA247	Hitachi
2N1300	TR-06	I.R.

2N1301	2SA247	Hitachi
2N1301	TR-06	I.R.

2N1302	TR-09	I.R.
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2N1303	2N425	Tung Sol
2N1303	2N363	Industro
2N1303	ASY63, ASY57	STC
2N1303	TR-07	I.R.

2N1304	TR-09	I.R.
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2N1305	TR-07	I.R.
2N1305	NKT125	Newmarket
2N1305	2N466	Industro
2N1305	2N426	Tung Sol
2N1305	ASY63, ASY58	STC

2N1306	TR-09	I.R.
2N1307	NKT124	Newmarket
2N1307	2N428	Industro
2N1307	2N427, 2N1313	Tung Sol
2N1307	ASY63, ASY55	STC
2N1307	TR-07	I.R.

2N1308	TR-09	I.R.
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2N1309	NKT124	Newmarket
2N1309	2N428	Industro
2N1309	2N428, 2N1313	Tung Sol
2N1309	ASY63	STC

2N1313	2SA209	Hitachi
2N1313	TR-07	I.R.

2N1314	2SB84	Hitachi
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2N1315	2SB84	Hitachi
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2N1316	2SA210	Hitachi
2N1316	TR-06	I.R.

2N1317	TR-06	I.R.
2N1317	2SA210	Hitachi

2N1318	2SA210	Hitachi
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2N1320	CTP-1728	Clevite
2N1320	2SB228	Hitachi

2N1322	CTP-1735	Clevite
2N1322	2SB229	Hitachi

2N1324	CTP-1729	Clevite
2N1324	2SB230	Hitachi

2N1326	CTP-1730	Clevite
2N1326	2SB230	Hitachi

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1328	CTP-1728	Clevite
2N1328	2SB228	Hitachi
2N1331	CTP-1729	Clevite
2N1331	2SB230	Hitachi
2N1333	CTP-1730	Clevite
2N1334	2SD125	Hitachi
2N1343	TR-06	I.R.
2N1344	TR-07	I.R.
2N1344	2SA209	Hitachi
2N1345	2SA210	Hitachi
2N1346	2SA210	Hitachi
2N1346	TR-07	I.R.
2N1347	TR-07	I.R.
2N1347	2SA209	Hitachi
2N1347	TR-07	I.R.
2N1348	2SA209	Hitachi
2N1349	2SA210	Hitachi
2N1350	2SA209	Hitachi
2N1351	2SA209	Hitachi
2N1352	2SA208	Hitachi
2N1352	TR-05	I.R.
2N1353	TR-07	I.R.
2N1353	2SA208	Hitachi
2N1354	2SA208	Hitachi
2N1355	2SA209	Hitachi
2N1355	TR-06	I.R.
2N1356	2SA209	Hitachi
2N1357	TR-06	I.R.
2N1357	2SA210	Hitachi
2N1358	CTP-1503	Clevite
2N1359	LT5099	C.B.S.
2N1359	CTP-1735	Clevite
2N1360	LT5102	C.B.S.
2N1360	CTP-1736	Clevite
2N1362	LT5117	C.B.S.
2N1362	CTP-1730	Clevite
2N1363	LT5120	C.B.S.
2N1363	CTP-1733	Clevite
2N1370	2SB77	Hitachi
2N1370	2N361	Industro

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1371	2SB77	Hitachi
2N1372	2SB89	Hitachi
2N1373	2SB89	Hitachi
2N1374	2SB89	Hitachi
2N1374	TR-721	Industro
2N1375	2SB89	Hitachi
2N1376	2SB89	Hitachi
2N1376	2N360	Industro
2N1377	2SB89	Hitachi
2N1380	2SB89	Hitachi
2N1381	2SB89	Hitachi
2N1382	2SB89	Hitachi
2N1382	2N466	Industro
2N1383	2SB89	Hitachi
2N1383	2N465	Industro
2N1386	BFY17	STC
2N1387	BFY17	STC
2N1395	2SA80	Hitachi
2N1395	TR17	I.R.
2N1396	2SA80	Hitachi
2N1396	TR17	I.R.
2N1397	2SA87	Hitachi
2N1397	TR17	I.R.
2N1398	TR17	I.R.
2N1399	TR17	I.R.
2N1400	TR17	I.R.
2N1401	TR17	I.R.
2N1402	TR17	I.R.
2N1405	TR18	I.R.
2N1406	TR18	I.R.
2N1407	TR18	I.R.
2N1411	TR17	I.R.
2N1411	T1850	Philco
2N1411	TR-06	I.R.
2N1412	CTP-1500	Clevite
2N1413	TR-05	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1414	TR-05	I.R.
2N1415	TR-05	I.R.
2N1416	2SB89	Hitachi
2N1416	2SA209	Hitachi
2N1420	2N2102	RCA
2N1420	2N1711	STC
2N1425	AP172	A.T.E.S.
2N1425	2SA83	Hitachi
2N1426	TR12	I.R.
2N1426	2SA84	Hitachi
2N1427	T1740	Philco
2N1427	TR17	I.R.
2N1427	TR-06	I.R.
2N1429	T1447	Philco
2N1431	TR-09	I.R.
2N1432	2SA85	Hitachi
2N1432	TR-07	I.R.
2N1436	TR12	I.R.
2N1446	TR-05	I.R.
2N1447	TR-05	I.R.
2N1448	TR-05	I.R.
2N1449	TR-05	I.R.
2N1450	TR-06	I.R.
2N1471	2SA209	Hitachi
2N1473	TR-10	I.R.
2N1478	T1282	Philco
2N1478	T1591	Philco
2N1479	2SD120	Hitachi
2N1479	ZT1479	Ferranti
2N1480	2SD121	Hitachi
2N1480	ZT1480	Ferranti
2N1481	2SD120	Hitachi
2N1481	ZT1481	Ferranti
2N1482	2SD120	Hitachi
2N1482	ZT1482	Ferranti
2N1483	2SD122	Hitachi
2N1483	ZT1483	Ferranti
2N1484	ZT1484	Ferranti
2N1484	2SD123	Hitachi
2N1485	ZT1485	Ferranti

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1485	2SD122	Hitachi
2N1486	2SD123	Hitachi
2N1486	ZT1486	Ferranti
2N1487	2SD124	Hitachi
2N1487	ZT1487	Ferranti
2N1488	ZT1488	Ferranti
2N1488	2SD125	Hitachi
2N1489	2SD124	Hitachi
2N1489	ZT1489	Ferranti
2N1490	ZT1490	Ferranti
2N1490	2SD125	Hitachi
2N1491	BFT17	STC
2N1492	BFT17, BFT26	STC
2N1494	T1808	Philco
2N1494	TR17	I.R.
2N1494A	T2418	Philco
2N1495	TR17	I.R.
2N1495	T1472	Philco
2N1496	T1473	Philco
2N1499	TR17	I.R.
2N1499A	T1973	Philco
2N1499A	T2119	Philco
2N1499B	T2934	Philco
2N1500	T1474	Philco
2N1500	T1947	Philco
2N1500	TR17	I.R.
2N1501	2SB228	Hitachi
2N1502	2SB84	Hitachi
2N1507	2N2102	RCA
2N1511	ZT1511	Ferranti
2N1512	ZT1512	Ferranti
2N1513	ZT1513	Ferranti
2N1514	ZT1514	Ferranti
2N1515	OC169	Rogers
2N1515	TR17	I.R.
2N1516	TR17	I.R.
2N1516	2SA234	Hitachi
2N1516	OC170	Rogers
2N1517	OC171	Rogers

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1518	CTP-1544	Clevite
2N1519	CTP-1545	Clevite
2N1524	AF172	A.T.E.S.
2N1524	TR17	I.R.
2N1525	TR17	I.R.
2N1525	AF172	A.T.E.S.
2N1526	TR17	I.R.
2N1527	AF170	A.T.E.S.
2N1527	TR17	I.R.
2N1529	CDT-1319	Clevite
2N1529	NKT401	Newmarket
2N1530	NKT401	Newmarket
2N1530	CTP-1320	Clevite
2N1531	NKT401	Newmarket
2N1531	CDT-1321	Clevite
2N1532	CDT-1322	Clevite
2N1534	CDT-1319	Clevite
2N1534	NKT404	Newmarket
2N1535	NKT403	Newmarket
2N1535	CDT-1320	Clevite
2N1536	CDT-1321	Clevite
2N1536	NKT403	Newmarket
2N1536	2PGT7	Radiospares
2N1537	CDT-1322	Clevite
2N1539	CDT-1310	Clevite
2N1539	NKT402	Newmarket
2N1540	NKT402	Newmarket
2N1540	CDT-1311	Clevite
2N1541	CDT-1312	Clevite
2N1541	NKT403	Newmarket
2N1542	CDT-1313	Clevite
2N1544	CDT-1310	Clevite
2N1544	NKT405	Newmarket
2N1545	NKT405	Newmarket
2N1545	CDT-1311	Clevite
2N1546	CDT-1312	Clevite
2N1547	CDT-1313	Clevite
2N1549	CTP-1508	Clevite
2N1550	CTP-1504	Clevite
2N1551	CTP-1503	Clevite
2N1552	CTP-1500	Clevite

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1553	CTP-1508	Clevite
2N1554	CTP-1504	Clevite
2N1555	CTP-1503	Clevite
2N1556	CTP-1500	Clevite
2N1557	2N1146	Clevite
2N1558	2N1146A	Clevite
2N1559	2N1146B	Clevite
2N1560	2N1146C	Clevite
2N1561	TR18	I.R.
2N1562	TR18	I.R.
2N1564	2N2102	RCA
2N1565	2N2102	RCA
2N1566	2N2102	RCA
2N1572	2N2102	RCA
2N1573	2N2102	RCA
2N1574	2N2102	RCA
2N1589	2N2102	RCA
2N1590	2N2102	RCA
2N1591	2N2102	RCA
2N1592	2N2102	RCA
2N1593	2N2102	RCA
2N1594	2N2102	RCA
2N1609	CTP-1729	Clevite
2N1610	CTP-1729	Clevite
2N1611	CTP-1735	Clevite
2N1612	CTP-1735	Clevite
2N1613	ZT1613	Perranti
2N1613	T2932	Philco
2N1613	2N2102	RCA
2N1613	2N1613	Raytheon
2N1631	AF169	A.T.E.S.
2N1631	TR17	I.R.
2N1632	AF169	A.T.E.S.
2N1632	TR17	I.R.
2N1633	AF172	A.T.E.S.
2N1633	TR17	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1634	TR17	I.R.
2N1634	AF172	A.T.E.S.
2N1635	TR17	I.R.
2N1635	AF170	A.T.E.S.
2N1636	AF170	A.T.E.S.
2N1637	TR17	I.R.
2N1639	TR17	I.R.
2N1646	TR17	I.R.
2N1676	T1558	Philco
2N1677	T1581	Philco
2N1700	ZT1700	Ferranti
2N1701	ZT1701	Ferranti
2N1702	ZT1702	Ferranti
2N1703	ZT1703	Ferranti
2N1704	ZT1704	Ferranti
2N1708	ZT1708	Ferranti
2N1711	ZT1711	Ferranti
2N1726	T1690	Philco
2N1726	TR18	I.R.
2N1727	TR18	I.R.
2N1727	T1691	Philco
2N1728	T1692	Philco
2N1728	TR18	I.R.
2N1742	T1832	Philco
2N1742	TR18	I.R.
2N1743	T1833	Philco
2N1743	TR18	I.R.
2N1744	T1859	Philco
2N1744	TR18	I.R.
2N1745	TR18	I.R.
2N1745	T1858	Philco
2N1746	T1814	Philco
2N1746	TR18	I.R.
2N1747	T1657	Philco
2N1747	TR18	I.R.
2N1748	T2019	Philco
2N1748	TR18	I.R.
2N1748A	T1737	Philco

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1749	T1738	Philco
2N1749	TR17	I.R.
2N1750	TR17	I.R.
2N1750	T1831	Philco
2N1751	TR17	I.R.
2N1752	T1851	Philco
2N1752	TR17	I.R.
2N1754	TR17	I.R.
2N1754	T1361	Philco
2N1785	T2015	Philco
2N1785	TR18	I.R.
2N1786	T2016	Philco
2N1786	TR18	I.R.
2N1787	T2017	Philco
2N1787	TR18	I.R.
2N1788	T2021	Philco
2N1788	TR18	I.R.
2N1789	T2022	Philco
2N1789	TR18	I.R.
2N1790	T2023	Philco
2N1790	TR18	I.R.
2N1864	T2020	Philco
2N1864	TR18	I.R.
2N1865	T2024	Philco
2N1865	TR18	I.R.
2N1866	T2025	Philco
2N1866	TR18	I.R.
2N1867	T2026	Philco
2N1867	TR18	I.R.
2N1868	T2018	Philco
2N1868	TR18	I.R.
2N1872	2N2102	RCA
2N1872	TR12	I.R.
2N1873	TR17	I.R.
2N1874	TR17	I.R.
2N1875	TR17	I.R.
2N1886	2N2102	RCA
2N1887	2N2102	RCA
2N1889	2N1893, 2N1613	STC
2N1890	2N2102	RCA
2N1890	2N1893, 2N1711	STC

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N1893	T2933	Philco
2N1893	2N2102	RCA
2N1893	2N1893	Raytheon
2N1905	AL101	A.T.E.S.
2N1906	AL100	A.T.E.S.
2N1974	ZT66	Ferranti
2N1975	ZT66	Ferranti
2N1983	2N1711	STC
2N1984	2N697	Raytheon
2N1984	2N1613	STC
2N1985	2N697	Raytheon
2N1985	2N1613,BFY17	STC
2N1986	2N697	Raytheon
2N1986	2N1893	STC
2N1987	2N697	Raytheon
2N1987	2N1613,BFY17	STC
2N1988	2N699	Raytheon
2N1988	2N1893	STC
2N1989	2N1893	STC
2N1990	2N699	Raytheon
2N2015	ZT2015	Ferranti
2N2016	ZT2016	Ferranti
2N2048	T2211	Philco
2N2048	TR17	I.R.
2N2059	TR17	I.R.
2N2061	NKT404	Newmarket
2N2061A	TR-02	I.R.
2N2061A	TR-01	I.R.
2N2062	NKT404	Newmarket
2N2062A	TR-02	I.R.
2N2062A	TR-01	I.R.
2N2063	NKT404	Newmarket
2N2063A	TR-02	I.R.
2N2063A	TR-01	I.R.
2N2064	NKT404	Newmarket
2N2064A	TR-01	I.R.
2N2064A	TR-02	I.R.
2N2065	NKT401	Newmarket
2N2066	NKT403	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N2083	AF168	A.T.E.S.
2N2086	T2198	Philco
2N2087	T2299	Philco
2N2089	TR17	I.R.
2N2090	TR17	I.R.
2N2091	TR17	I.R.
2N2092	TR17	I.R.
2N2093	TR17	I.R.
2N2102	ZT2102	Ferranti
2N2137	TR-02	I.R.
2N2137	TR-01	I.R.
2N2138	TR-01	I.R.
2N2139	TR-01	I.R.
2N2147	AL102	A.T.E.S.
2N2148	AL103	A.T.E.S.
2N2161	T2144	Philco
2N2168	TR18	I.R.
2N2169	TR18	I.R.
2N2170	TR18	I.R.
2N2182	T2088	Philco
2N2183	T2145	Philco
2N2184	T2089	Philco
2N2185	T2363	Philco
2N2186	T2415	Philco
2N2187	T2357	Philco
2N2188	TR18	I.R.
2N2189	TR18	I.R.
2N2190	TR18	I.R.
2N2191	TR18	I.R.
2N2199	TR17	I.R.
2N2200	TR17	I.R.
2N2205	ZT2205	Ferranti
2N2206	ZT2206	Ferranti

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N2258	TR17	I.R.
2N2259	TR17	I.R.
2N2270	ZT2270	Ferranti
2N2274	T2452	Philco
2N2275	T2469	Philco
2N2276	T2453	Philco
2N2277	T2470	Philco
2N2278	T2454	Philco
2N2278	TR18	I.R.
2N2280	T2455	Philco
2N2281	T2472	Philco
2N2360	T2588	Philco
2N2361	T2569	Philco
2N2362	T2580	Philco
2N2374	T2560	Philco
2N2375	T2392	Philco
2N2376	T2393	Philco
2N2380	T2340	Philco
2N2380A	T2500	Philco
2N2398	T2578	Philco
2N2399	T2579	Philco
2N2400	T2490	Philco
2N2400	TR17	I.R.
2N2401	T2491	Philco
2N2401	TR17	I.R.
2N2402	T2492	Philco
2N2402	TR17	I.R.
2N2410	2N1711, 2N914	STC
2N2413	BFY19	STC
2N2413	ZT708	Ferranti
2N2443	2N1893	STC
2N2455	TR17	I.R.
2N2456	TR17	I.R.
2N2475	ZT2475	Ferranti
2N2476	ZT2476	Ferranti

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2N2477	ZT2477	Ferranti
2N2478	T2610	Philco
2N2479	T2611	Philco
2N2483	BFY26, 2N929	STC
2N2484	BFY26, 2N930	STC
2N2487	TR11	I.R.
2N2488	TR11	I.R.
2N2489	TR11	I.R.
2N2529	BFY18, 2N706	STC
2N2530	2N706, BFY18	STC
2N2531	2N706, BFY18	STC
2N2532	2N929	STC
2N2533	BFY18, 2N706	STC
2N2534	2N929	STC
2N2587	TR18	I.R.
2N2631	ZT2631	Ferranti
2N2645	BFY26, 2N1613	STC
2N2651	T2479	Philco
2N2654	TR18	I.R.
2N2671	TR18	I.R.
2N2677	TR18	I.R.
2N2699	T2820	Philco
2N2708	ZT2708	Ferranti
2N2710	T2691	Philco
2N2856	ZT2856	Ferranti
2N2857	ZT2857	Ferranti
2N2938	ZT2938	Ferranti
2NJ5A	2SA31	Kobe Kogyo
2NJ5A	TR-07	I.R.
2NJ8A	2SA30	Kobe Kogyo
2NJ8A	TR-06	I.R.
2NJ8A	TR11	I.R.
2NJ9A	2SB33	Kobe Kogyo
2NJ9A	TR15	I.R.
2NJ9A	TR-05	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2NJ9D	2SB32	Kobe Kogyo
2S001	ST721	G.E.C.
2S001	2N332	Transitron
2S002	ST722	G.E.C.
2S002	2N333	Transitron
2S002	ZT22	Ferranti
2S003	2N334	Transitron
2S003	ST722	G.E.C.
2S003	ZT22	Ferranti
2S004	2N335	Transitron
2S004	ST723	G.E.C.
2S004	ZT23	Ferranti
2S005	2N338	Transitron
2S005	ZT24	Ferranti
2S012	2N389	Transitron
2S012	ZT1511	Ferranti
2S012A	ZT1512	Ferranti
2S013	2N424	Transitron
2S013A	ZT1511	Ferranti
2S014	ZT22	Ferranti
2S014	2N337	Transitron
2S017	ZT1479	Ferranti
2S017	2N497	Transitron
2S018	ZT1480	Ferranti
2S018	2N498	Transitron
2S019	ZT2270	Ferranti
2S019	2N656	Transitron
2S020	ZT92	Ferranti
2S020	2N657	Transitron
2S1A	TR11	I.R.
2S12	TR-06	I.R.
2S12	NKT72	Newmarket
2S13	TR-07	I.R.
2S13	TR13	I.R.
2S13	NKT73	Newmarket
2S14	TR-05	I.R.
2S14	NKT274	Newmarket
2S15	TR-05	I.R.
2S15	TR15	I.R.
2S15	NKT271	Newmarket
2S15A	TR-05	I.R.
2S15A	TR15	I.R.
2S22	TR-05	I.R.
2S22	TR15	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2S24	TR-05	I.R.
2S24	TR14	I.R.
2S25	TR-07	I.R.
2S26	NKT452	Newmarket
2S26A	NKT452	Newmarket
2S30	AP101	Telefunken
2S30	2SA30	Kobe Kogyo
2S30	TR-06	I.R.
2S30	TR11	I.R.
2S30	NKT72	Newmarket
2S31	2SA31	Kobe Kogyo
2S31	TR-07	I.R.
2S31	TR13	I.R.
2S31	NKT73	Newmarket
2S32	2SB32	Kobe Kogyo
2S32	TR14	I.R.
2S32	TR-05	I.R.
2S32	NKT274	Newmarket
2S33	2SB33	Kobe Kogyo
2S33	TR-05	I.R.
2S33	TR14	I.R.
2S33	NKT271	Newmarket
2S34	2SB34	Kobe Kogyo
2S34	TR15	I.R.
2S34	NKT274	Newmarket
2S35	2SA35	Kobe Kogyo
2S35	TR11	I.R.
2S35	NKT72	Newmarket
2S36	2SA36	Kobe Kogyo
2S36	TR13	I.R.
2S36	NKT72	Newmarket
2S37	2SB37	Kobe Kogyo
2S37	NKT271	Newmarket
2S38	2SB38	Kobe Kogyo
2S38	NKT271	Newmarket
2S39	2SB39	Kobe Kogyo
2S39	TR14	I.R.
2S39	NKT275	Newmarket
2S40	2SA40	Kobe Kogyo
2S40	TR15	I.R.
2S41	2SB41	Kobe Kogyo
2S42	2SB42	Kobe Kogyo
2S43	2SA43	Kobe Kogyo
2S43	TR14	I.R.
2S43	NKT675	Newmarket
2S44	TR-05	I.R.
2S44	NKT73	Newmarket
2S45	TR-07	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2S45	TR13	I.R.
2S45	NKT73	Newmarket
2S47	NKT275	Newmarket
2S48	NKT677	Newmarket
2S49	TR-07	I.R.
2S49	TR13	I.R.
2S49	NKT73	Newmarket
2S51	NKT72	Newmarket
2S52	TR11	I.R.
2S52	TR-07	I.R.
2S52	TR13	I.R.
2S52	NKT72	Newmarket
2S53	TR-07	I.R.
2S53	TR13	I.R.
2S53	TR11	I.R.
2S53	NKT73	Newmarket
2S54	TR-05	I.R.
2S54	TR15	I.R.
2S54	NKT274	Newmarket
2S55	NKT271	Newmarket
2S56	TR-05	I.R.
2S56	TR15	I.R.
2S56	NKT271	Newmarket
2S59	NKT675	Newmarket
2S60	TR-06	I.R.
2S60	TR11	I.R.
2S60	NKT677	Newmarket
2S60A	NKT675	Newmarket
2S61	2SB61	Kobe Kogyo
2S61	NKT274	Newmarket
2S62	2SA62	Kobe Kogyo
2S63	2SA63	Kobe Kogyo
2S64	2SA64	Kobe Kogyo
2S65	2SB65	Kobe Kogyo
2S91	TR15	I.R.
2N91	TR-06	I.R.
2S92	TR-06	I.R.
2S92	TR11	I.R.
2S92	NKT677	Newmarket
2S92A	TR-06	I.R.
2S92A	TR11	I.R.
2S92A	NKT675	Newmarket
2S93	TR11	I.R.
2S93	TR-06	I.R.
2S93A	TR-06	I.R.
2S93A	TR11	I.R.
2S93A	NKT675	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2S95	2SA95	Kobe Kogyo
2S96	2SA96	Kobe Kogyo
2S97	2SA97	Kobe Kogyo
2S98	2SA93	Kobe Kogyo
2S99	2SA99	Kobe Kogyo
2S100	NKT275	Newmarket
2S101	ZT41	Ferranti
2S102	ZT42	Ferranti
2S102	ST102	Transitron
2S103	ST103	Transitron
2S103	ZT43	Ferranti
2S104	ST104	Transitron
2S104	ZT44	Ferranti
2S108	2SA108	Kobe Kogyo
2S108	NKT675	Newmarket
2S109	AP136	Telefunken
2S109	TR11	I.R.
2S109	2SA109	Kobe Kogyo
2S109	NKT675	Newmarket
2S110	TR11	I.R.
2S110	2SA110	Kobe Kogyo
2S110	NKT675	Newmarket
2S111	2SA111	Kobe Kogyo
2S111	NKT675	Newmarket
2S112	NKT675	Newmarket
2S112	2SA112	Kobe Kogyo
2S112	TR11	I.R.
2S131	ZT2205	Ferranti
2S141	TR11	I.R.
2S142	TR11	I.R.
2S143	TR11	I.R.
2S145	TR11	I.R.
2S146	TR11	I.R.
2S155	TR-07	I.R.
2S155	TR13	I.R.
2S159	TR-06	I.R.
2S159	TR12	I.R.
2S159	TR11	I.R.
2S160	TR-06	I.R.
2S160	TR12	I.R.
2S160	TR11	I.R.
2S163	TR-05	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2S167	TR15	I.R.
2S174	TR15	I.R.
2S175	NKT676	Newmarket
2S178	TR-06	I.R.
2S178	TR11	I.R.
2S179	TR15	I.R.
2S179	TR-05	I.R.
2S189	NKT271	Newmarket
2S512	2ST10	Radiospares
2S701	ZT202	Ferranti
2S702	ZT203	Ferranti
2S703	ZT204	Ferranti
2S731	ZT402	Ferranti
2S732	ZT403	Ferranti
2S733	ZT404	Ferranti
2SA12	TR11	I.R.
2SA12	NKT73	Newmarket
2SA13	TR-07	I.R.
2SA13	TR11	I.R.
2SA13	NKT73	Newmarket
2SA14	TR-07	I.R.
2SA14	TR13	I.R.
2SA14	NKT73	Newmarket
2SA15	TR-06	I.R.
2SA15	TR12	I.R.
2SA15	NKT72	Newmarket
2SA16	TR12	I.R.
2SA16	TR-06	I.R.
2SA16	NKT72	Newmarket
2SA17	TR12	I.R.
2SA17	TR-06	I.R.
2SA17	NKT677	Newmarket
2SA18	TR12	I.R.
2SA18	NKT677	Newmarket
2SA28	NKT73	Newmarket
2SA29	NKT72	Newmarket
2SA30	TR12	I.R.
2SA30	TR-06	I.R.
2SA30	NKT72	Newmarket
2SA31	TR13	I.R.
2SA31	TR-06	I.R.
2SA31	NKT73	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2SA35	TR11	I.R.
2SA35	NKT72	Newmarket
2SA36	NKT73	Newmarket
2SA36	AF101	Telefunken
2SA37	TR11	I.R.
2SA37	NKT72	Newmarket
2SA38	TR11	I.R.
2SA39	TR11	I.R.
2SA39	NKT73	Newmarket
2SA40	TR13	I.R.
2SA43	TR12	I.R.
2SA49	TR13	I.R.
2SA49	TR-06	I.R.
2SA49	NKT73	Newmarket
2SA50	TR-05	I.R.
2SA51	TR-06	I.R.
2SA51	NKT72	Newmarket
2SA52	TR-06	I.R.
2SA52	NKT73	Newmarket
2SA52	TR11	I.R.
2SA53	TR-07	I.R.
2SA53	NKT73	Newmarket
2SA53	TR13	I.R.
2SA57	TR11	I.R.
2SA57	NKT674	Newmarket
2SA58	TR-06	I.R.
2SA58	TR11	I.R.
2SA58	NKT675	Newmarket
2SA59	NKT675	Newmarket
2SA60	TR11	I.R.
2SA60	TR-06	I.R.
2SA60	NKT675	Newmarket
2SA61	TR-06	I.R.
2SA64	TR12	I.R.
2SA70	TR-07	I.R.
2SA71	TR-07	I.R.
2SA72	TR-06	I.R.
2SA72	NKT677	Newmarket
2SA73	NKT677	Newmarket
2SA74	NKT677	Newmarket
2SA75	TR-05	I.R.
2SA75	NKT677	Newmarket
2SA76	TR-07	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2SA76	NKT674	Newmarket
2SA77	NKT675	Newmarket
2SA80	2SA350	Hitachi
2SA80	TR-06	I.R.
2SA80	NKT675	Newmarket
2SA81	2SA351	Hitachi
2SA81	TR-06	I.R.
2SA81	TR12	I.R.
2SA81	NKT675	Newmarket
2SA82	TR-06	I.R.
2SA82	2SA352	Hitachi
2SA82	NKT675	Newmarket
2SA83	2SA353	Hitachi
2SA83	NKT677	Newmarket
2SA84	2SA354	Hitachi
2SA84	TR12	I.R.
2SA84	TR-06	I.R.
2SA84	NKT677	Newmarket
2SA85	2SA355	Hitachi
2SA85	NKT677	Newmarket
2SA86	2SA358	Hitachi
2SA92	NKT676	Newmarket
2SA92	TR-06	I.R.
2SA93	TR11	I.R.
2SA93	TR-06	I.R.
2SA93	NKT676	Newmarket
2SA94	NKT677	Newmarket
2SA101	TR-06	I.R.
2SA101	2GT102	Radiospares
2SA102	TR-06	I.R.
2SA103	TR-06	I.R.
2SA106	NKT677	Newmarket
2SA107	NKT677	Newmarket
2SA108	NKT675	Newmarket
2SA109	TR12	I.R.
2SA109	NKT675	Newmarket
2SA110	TR12	I.R.
2SA110	TR-06	I.R.
2SA110	NKT675	Newmarket
2SA111	TR12	I.R.
2SA111	NKT675	Newmarket
2SA112	TR12	I.R.
2SA112	NKT677	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2SA113	TR12	I.R.
2SA113	NKT677	Newmarket
2SA114	TR12	I.R.
2SA114	NKT677	Newmarket
2SA115	NKT675	Newmarket
2SA116	NKT675	Newmarket
2SA117	NKT675	Newmarket
2SA118	NKT675	Newmarket
2SA121	NKT676	Newmarket
2SA121	2T201	Sony
2SA122	2T201	Sony
2SA123	2T201	Sony
2SA123	NKT676	Newmarket
2SA124	NKT676	Newmarket
2SA124	2T203	Sony
2SA125	2T205A	Sony
2SA125	NKT675	Newmarket
2SA127	NKT677	Newmarket
2SA130	NKT675	Newmarket
2SA131	NKT675	Newmarket
2SA132	NKT675	Newmarket
2SA132	TR-06	I.R.
2SA133	NKT677	Newmarket
2SA136	TR13	I.R.
2SA136	TR-06	I.R.
2SA136	NKT72	Newmarket
2SA137	TR11	I.R.
2SA137	NKT73	Newmarket
2SA141	TR-06	I.R.
2SA142	TR-06	I.R.
2SA144	TR11	I.R.
2SA145	TR-06	I.R.
2SA145	TR13	I.R.
2SA149	TR-06	I.R.
2SA151	TR-07	I.R.
2SA151	TR13	I.R.
2SA152	TR-06	I.R.
2SA152	TR11	I.R.
2SA153	TR-06	I.R.
2SA153	NKT675	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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28A154	AF137	Telefunken
28A154	NKT677	Newmarket
28A155	TR-06	I.R.
28A155	NKT677	Newmarket
28A156	NKT677	Newmarket
28A156	TR-06	I.R.
28A157	TR-06	I.R.
28A157	NKT677	Newmarket
28A159	NKT677	Newmarket
28A160	TR-06	I.R.
28A160	NKT677	Newmarket
28A175	TR11	I.R.
28A175	NKT676	Newmarket
28A180	TR12	I.R.
28A181	TR-06	I.R.
28A182	TR13	I.R.
28A183	TR12	I.R.
28A201	TR13	I.R.
28A202	TR12	I.R.
28A203	TR13	I.R.
28A213	NKT677	Newmarket
28A213	TR-06	I.R.
28A214	TR-06	I.R.
28A214	NKT677	Newmarket
28A215	NKT677	Newmarket
28A216	TR-06	I.R.
28A216	NKT677	Newmarket
28A233	NKT676	Newmarket
28A234	TR-06	I.R.
28A234	NKT676	Newmarket
28A235	TR-06	I.R.
28A235	NKT674	Newmarket
28A236	NKT676	Newmarket
28A237	TR13	I.R.
28A237	NKT677	Newmarket
28A239	TR17	I.R.
28A240	TR-06	I.R.
28A246	TR18	I.R.
28A247	TR17	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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28A254	NKT72	Newmarket
28A255	NKT73	
28A256	TR17	I.R.
28A257	TR17	I.R.
28A266	TR17	I.R.
28A267	TR17	I.R.
28A268	TR12	I.R.
28A269	TR12	I.R.
28A270	TR12	I.R.
28A270	NKT677	Newmarket
28A271	TR12	I.R.
28A271	NKT677	Newmarket
28A272	TR11	I.R.
28A272	NKT677	Newmarket
28A273	TR12	I.R.
28A274	TR11	I.R.
28A275	TR12	I.R.
28A276	TR18	I.R.
28A285	TR-06	I.R.
28A336	28A356	Hitachi
28A337	28A357	Hitachi
28A403	TR18	I.R.
28A404	TR18	I.R.
28B22	TR-05	I.R.
28B22	TR15	I.R.
28B23	TR15	I.R.
28B25	TR-01	I.R.
28B25	NKT452	Newmarket
28B26	TR-01	I.R.
28B26	NKT452	Newmarket
28B27	NKT452	Newmarket
28B28	NKT452	Newmarket
28B29	NKT452	Newmarket
28B30	NKT452	Newmarket
28B31	NKT452	Newmarket
28B32	NKT274	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2SB32	TR-05	I.R.
2SB33	TR-05	I.R.
2SB33	TR14	I.R.
2SB33	NKT271	Newmarket
2SB34	TR-05	I.R.
2SB34	NKT271	Newmarket
2SB34	TR15	I.R.
2SB37	TR-05	I.R.
2SB37	TR14	I.R.
2SB37	NKT274	Newmarket
2SB38	NKT271	Newmarket
2SB38	TR-05	I.R.
2SB39	TR14	I.R.
2SB39	NKT274	Newmarket
2SB40	TR15	I.R.
2SB40	TR-05	I.R.
2SB41	NKT452	Newmarket
2SB43	NKT271	Newmarket
2SB44	NKT271	Newmarket
2SB46	TR-05	I.R.
2SB46	NKT274	Newmarket
2SB46	TR15	I.R.
2SB47	TR-05	I.R.
2SB47	TR15	I.R.
2SB47	NKT275	Newmarket
2SB48	TR14	I.R.
2SB48	2T311	Sony
2SB48	TR-05	I.R.
2SB48	2T312	Sony
2SB48	NKT271	Newmarket
2SB49	2T314	Sony
2SB49	2T313	Sony
2SB49	TR-05	I.R.
2SB49	NKT274	Newmarket
2SB50	NKT271	Newmarket
2SB50	2T315	Sony
2SB51	TR14	I.R.
2SB51	2T322	Sony
2SB51	2T321	Sony
2SB51	TR-05	I.R.
2SB51	NKT271	Newmarket
2SB52	2T323	Sony
2SB52	2T324	Sony
2SB52	TR-06	I.R.
2SB52	NKT271	Newmarket
2SB53	TR15	I.R.
2SB53	2T383	Sony
2SB54	TR-05	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2SB54	NKT274	Newmarket
2SB55	TR15	I.R.
2SB56	NKT271	Newmarket
2SB61	TR-05	I.R.
2SB61	TR15	I.R.
2SB61	NKT274	Newmarket
2SB64	NKT452	Newmarket
2SB65	TR15	I.R.
2SB65	NKT274	Newmarket
2SB66	TR15	I.R.
2SB66	NKT274	Newmarket
2SB67	NKT271	Newmarket
2SB73	TR15	I.R.
2SB73	NKT275	Newmarket
2SB74	TR-05	I.R.
2SB74	TR15	I.R.
2SB75	TR15	I.R.
2SB75	NKT274	Newmarket
2SB76	TR13	I.R.
2SB77	TR-05	I.R.
2SB77	TR15	I.R.
2SB77	NKT271	Newmarket
2SB78	TR-05	I.R.
2SB78	TR14	I.R.
2SB83	NKT451	Newmarket
2SB89	TR-05	I.R.
2SB89	NKT271	Newmarket
2SB91	NKT274	Newmarket
2SB92	TR-05	I.R.
2SB94	NKT271	Newmarket
2SB97	NKT275	Newmarket
2SB100	TR15	I.R.
2SB101	TR15	I.R.
2SB102	TR15	I.R.
2SB110	TR-05	I.R.
2SB111	TR-05	I.R.
2SB111	NKT275	Newmarket
2SB112	TR-05	I.R.
2SB112	NKT275	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2SB113	AC122	Telefunken
2SB113	TR15	I.R.
2SB113	NKT274	Newmarket

2SB114	TR15	I.R.
2SB114	NKT271	Newmarket

2SB115	TR-05	I.R.
2SB115	TR15	I.R.
2SB115	NKT271	Newmarket

2SB116	TR-05	I.R.
2SB116	NKT274	Newmarket

2SB117	TR15	I.R.
2SB117	NKT274	Newmarket

2SB120	TR-05	I.R.
2SB120	TR15	I.R.
2SB120	NKT274	Newmarket

2SB121	NKT271	Newmarket
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2SB131	NKT452	Newmarket
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2SB132	NKT452	Newmarket
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2SB136	TR-05	I.R.
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2SB140	2T3011	Sony
2SB140	NKT452	Newmarket

2SB141	2T3021	Sony
2SB141	NKT452	Newmarket

2SB142	2T3030	Sony
2SB142	NKT452	Newmarket

2SB143	2T3031	Sony
2SB143	2T3032	Sony
2SB143	NKT452	Newmarket

2SB144	2T3032	Sony
2SB144	2T3033	Sony
2SB144	NKT452	Newmarket

2SB145	2T3041	Sony
2SB145	2T3042	Sony
2SB145	NKT452	Newmarket

2SB146	2T3042	Sony
2SB146	2T3043	Sony
2SB146	NKT452	Newmarket

2SB153	TR-05	I.R.
2SB153	TR15	I.R.

2SB154	TR-05	I.R.
2SB154	TR15	I.R.

2SB155	TR-05	I.R.
2SB155	TR15	I.R.
2SB155	NKT271	Newmarket

2SB156	TR-05	I.R.
2SB156	NKT271	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2SB156A	NKT271	Newmarket
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2SB157	TR13	I.R.
2SB157	TR15	I.R.

2SB158	TR13	I.R.
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2SB160	TR13	I.R.
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2SB163	TR-05	I.R.
2SB163	TR15	I.R.

2SB164	TR15	I.R.
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2SB165	TR-05	I.R.
2SB165	TR15	I.R.

2SB168	TR-05	I.R.
2SB168	TR15	I.R.
2SB168	NKT274	Newmarket

2SB169	TR-05	I.R.
2SB169	TR15	I.R.
2SB169	NKT271	Newmarket

2SB170	TR-05	I.R.
2SB170	TR15	I.R.

2SB171	TR-05	I.R.
2SB171	TR15	I.R.
2SB171	2GT182	Radiospares

2SB172	TR-05	I.R.
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2SB173	TR-05	I.R.
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2SB174	TR15	I.R.
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2SB175	TR15	I.R.
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2SB176	TR-05	I.R.
2SB176	2GT174	Radiospares

2SB178	2GT182	Radiospares
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2SB183	NKT274	Newmarket
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2SB184	TR15	I.R.
2SB184	NKT271	Newmarket

2SB185	TR-05	I.R.
2SB185	TR15	I.R.

2SB186	TR-05	I.R.
2SB186	TR15	I.R.

2SB187	TR-05	I.R.
2SB187	TR15	I.R.

2SB188	TR15	I.R.
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2SB189	TR-05	I.R.
2SB189	NKT271	Newmarket

2SB199	TR-05	I.R.
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TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2SB199 TR14 I.R.
2SB199 NKT271 Newmarket

2SB200 TR-05 I.R.
2SB200 TR15 I.R.
2SB200 NKT271 Newmarket

2SB202 TR-05 I.R.
2SB202 TR15 I.R.
2SB202 NKT271 Newmarket

2SB219 NKT274. Newmarket

2SB220 TR-05 I.R.
2SB220 NKT274 Newmarket

2SB221 TR-05 I.R.
2SB221 NKT274 Newmarket

2SB222 TR-05 I.R.
2SB222 NKT274 Newmarket

2SB223 NKT274 Newmarket

2SB248 NKT452 Newmarket

2SB251 NKT452 Newmarket

2SB257 NKT275 Newmarket

2SB261 TR14 I.R.
2SB261 NKT275 Newmarket

2SB262 TR15 I.R.
2SB262 NKT274 Newmarket

2SB263 TR15 I.R.
2SB263 NKT271 Newmarket

2SB264 TR15 I.R.

2SB265 TR15 I.R.

2SB326 TR15 I.R.

2SB327 TR15 I.R.

2SB328 TR15 I.R.
2SB328 NKT274 Newmarket

2SB329 TR15 I.R.
2SB329 NKT274 Newmarket

2SB364 NKT271 Newmarket

2SB426 TR16 I.R.

2SC73 TR-06 I.R.
2SC73 2T73 Sony
2SC73 2T73R Sony

2SC75 2T75 Sony
2SC75 2T75R Sony

2SC76 2T76 Sony

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2SC76 2T76R Sony
2SC76 TR-07 I.R.

2SC77 2T77 Sony
2SC77 2T77R Sony

2SC78 2T78 Sony
2SC78 2T78R Sony

2SD19 NKT773 Newmarket

2SD20 NKT773 Newmarket

2SD21 NKT773 Newmarket

2SD22 NKT773 Newmarket

2SD23 NKT773 Newmarket

2SD33 NKT773 Newmarket

2SD43 NKT773 Newmarket

2SD44 NKT773 Newmarket

2SD61 2T681 Sony
2SD61 NKT773 Newmarket

2SD62 2T682 Sony

2SD63 2T69 Sony

2SD64 2T64 Sony
2SD64 2T64R Sony
2SD64 TR15 I.R.
2SD64 NKT773 Newmarket

2SD65 2T65 Sony
2SD65 2T65R Sony
2SD65 TR-07 I.R.
2SD65 TR15 I.R.
2SD65 NKT773 Newmarket

2SD66 2T66 Sony
2SD66 2T66R Sony
2SD66 NKT773 Newmarket

2SD75 NKT773 Newmarket

2SD77 NKT773 Newmarket

2T1 NKT773 Newmarket

2T11 NKT275 Newmarket

2T12 NKT275 Newmarket

2T13 NKT275 Newmarket

2T14 NKT275 Newmarket

2T15 NKT275 Newmarket

2T16 NKT275 Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2T18	NKT275	Newmarket
2T22	NKT271	Newmarket
2T23	NKT271	Newmarket
2T24	NKT271	Newmarket
2T25	NKT271	Newmarket
2T26	NKT271	Newmarket
2T61	NKT773	Newmarket
2T62	NKT773	Newmarket
2T63	NKT773	Newmarket
2T64	TR-09	I.R.
2T64	NKT773	Newmarket
2T64R	NKT773	Newmarket
2T65	TR-09	I.R.
2T65	NKT773	Newmarket
2T65R	NKT773	Newmarket
2T66	NKT773	Newmarket
2T66	TR-09	I.R.
2T66R	NKT773	Newmarket
2T67	NKT773	Newmarket
2T69	NKT773	Newmarket
2T75	TR-10	I.R.
2T82	NKT271	Newmarket
2T83	NKT271	Newmarket
2T84	TR-09	I.R.
2T84	NKT271	Newmarket
2T85	TR-09	I.R.
2T85	NKT271	Newmarket
2T86	TR-09	I.R.
2T86	NKT271	Newmarket
2T201	NKT675	Newmarket
2T203	NKT675	Newmarket
2T311	NKT274	Newmarket
2T312	NKT274	Newmarket
2T313	NKT274	Newmarket
2T314	NKT274	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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2T315	NKT274	Newmarket
2T321	NKT271	Newmarket
2T383	NKT275	Newmarket
2T524	TR-10	I.R.
2T681	NKT773	Newmarket
2T2001	NKT677	Newmarket
2T3030	NKT451	Newmarket
2T3031	NKT451	Newmarket
2T3032	NKT451	Newmarket
2T3033	NKT451	Newmarket
121-44	TR-06	I.R.
121-45	TR-06	I.R.
121-46	TR-05	I.R.
121-52	TR-05	I.R.
121-61	TR-05	I.R.
121-64	TR-05	I.R.
121-101	TR11	I.R.
121-128	TR12	I.R.
121-145	TR12	I.R.
121-146	TR12	I.R.
121-147	TR12	I.R.
121-180	TR17	I.R.
121-186	TR-06	I.R.
121-187	TR-06	I.R.
121-189	TR-06	I.R.
121-190	TR-05	I.R.
121-191	TR-05	I.R.
222	OC45	Rogers
225	OC45	Rogers
228	OC44	Rogers
300	OC72	Rogers
301	OC72	Rogers

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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302	OC72	Rogers
310	OC72	Rogers
350	OC72	Rogers
352	OC72	Rogers
353	OC72	Rogers
1032	OC72	Rogers
1033	OC72	Rogers
1034	OC72	Rogers
1035	OC72	Rogers
1036	OC72	Rogers
AA129	NKT279A	Newmarket
AC28	TR15	I.R.
AC105	NKT675	Newmarket
AC105	NKT222	Newmarket
AC106	NKT222	Newmarket
AC107	NKT226	Newmarket
AC107	AC137	A.T.E.S.
AC107	GET870	G.E.C.
AC107	TR-05	I.R.
AC107	2GT102	Radiospares
AC107	NKT216	Newmarket
AC108	NKT272	Newmarket
AC109	NKT274	Newmarket
AC110	NKT274	Newmarket
AC113	2GT182	Radiospares
AC113	NKT272	Newmarket
AC114	NKT271	Newmarket
AC114	2GT182	Radiospares
AC115	NKT214	Newmarket
AC116	NKT213	Newmarket
AC117	NKT222	Newmarket
AC118	NKT222	Newmarket
AC119	NKT222	Newmarket
AC120	NKT271	Newmarket
AC120IV	NKT271	Newmarket
AC120V	NKT271	Newmarket
AC121	NKT271	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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AC122	NKT213	Newmarket
AC124	NKT227	Newmarket
AC125	NKT223	Newmarket
AC126	NKT229	Newmarket
AC127	NKT713	Newmarket
AC127	AC157	Thorn
AC127	TR-09	I.R.
AC127/OC81	NKT773/271	Newmarket
AC128	NKT218	Newmarket
AC128	AC139	A.T.E.S.
AC129	NKT219	Newmarket
AC130	NKT773	Newmarket
AC132	NKT212	Newmarket
AC151	NKT212	Newmarket
AC151 IV	NKT212	Newmarket
AC151 VI	NKT212	Newmarket
AC152 IV	NKT212	Newmarket
AC152 V	NKT212	Newmarket
AC153	NKT228	Newmarket
AC154	2FT182	Radiospares
AC156	NKT274	Newmarket
AC157	NKT773	Newmarket
AC160	NKT272	Newmarket
AC165	NKT272	Newmarket
AC166	NKT271	Newmarket
AC167	NKT271	Newmarket
AC168	NKT773	Newmarket
AC172	NKT713	Newmarket
AC177	NKT212	Newmarket
AC117	NKT237	Newmarket
AC118	NKT227	Newmarket
AC118	NKT238	Newmarket
AC119	NKT227	Newmarket
AC119	NKT239	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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ACY20	NKT221	Newmarket
ACY20	NKT240	Newmarket
ACY20	TR-05	I.R.
ACY21	NKT228	Newmarket
ACY21	NKT241	Newmarket
ACY21	TR-05	I.R.
ACY22	2GT182	Radiospares
ACY22	NKT261	Newmarket
ACY22	NKT242	Newmarket
ACY23	NKT243	Newmarket
ACY27	TR14	I.R.
ACY27	NKT214	Newmarket
ACY27	TK41C	Standard Tels
ACY28	NKT213	Newmarket
ACY28	TK42C	Standard Tels.
ACY28	TR14	I.R.
ACY29	NKT213	Newmarket
ACY29	TK45C	Standard Tels
ACY30	NKT213	Newmarket
ACY30	TK40C	Standard Tels
ACY30	TR15	I.R.
ACY31	TR15	I.R.
ACY31	NKT213	Newmarket
ACY31	TK23C	Standard Tels.
ACY34	NKT214	Newmarket
ACY34	TR14	I.R.
ACY35	TR14	I.R.
ACY35	NKT214	Newmarket
ACY36	NKT212	Newmarket
ACY36	TR14	I.R.
ACY40	NKT244	Newmarket
ACY40	TR-05	I.R.
ACY41	TR-05	I.R.
ACY41	NKT245	Newmarket
AD138	NKT402	Newmarket
AD139	NKT452	Newmarket
AD140	NKT452S1	Newmarket
AD140	NKT403	Newmarket
AD140	2PGT14	Radiospares
AD140	NKT452	Newmarket
AD149	NKT452S1	Newmarket
ADY22	NKT404	Newmarket
ADY22	NKT453	Newmarket
ADY23	NKT403	Newmarket
ADY24	NKT403	Newmarket
ADZ11	2PGT7	Radiospares

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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AF101	NKT128	Newmarket
AF102	TR18	I.R.
AF105	NKT677	Newmarket
AF105	TR17	I.R.
AF106	TR18	I.R.
AF107	TR18	I.R.
AF114	AF164	A.T.E.S.
AF114	TR17	I.R.
AF114	2G414	Texas
AF114	2GT117	Radiospares
AF114	NKT674	Newmarket
AF115	TR17	I.R.
AF115	NKT675	Newmarket
AF115	2G415	Texas
AF115	AF165	A.T.E.S.
AF115	AF168	A.T.E.S.
AF115	2GT117	Radiospares
AF116	TR18	I.R.
AF116	NKT676	Newmarket
AF116	AF170	A.T.E.S.
AF116	AF166	A.T.E.S.
AF116	2G416	Texas
AF116	2GT117	Radiospares
AF117	2G417	Texas
AF117	NKT677	Newmarket
AF117	AF172	A.T.E.S.
AF117	2GT117	Radiospares
AF117	TR18	I.R.
AF118	NKT678	Newmarket
AF119	NKT677	Newmarket
AF120	NKT676	Newmarket
AF124	2GT117	Radiospares
AF124	TR17	I.R.
AF124	NKT674	Newmarket
AF125	2GT117	Radiospares
AF125	NKT675	Newmarket
AF125	TR17	I.R.
AF126	2GT117	Radiospares
AF126	NKT676	Newmarket
AF126	TR17	I.R.
AF127	2GT117	Radiospares
AF127	TR17	I.R.
AF127	NKT677	Newmarket
AF129	TR18	I.R.
AF130	TR18	I.R.
AF130	NKT674	Newmarket
AF131	TR18	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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AP132	NKT676	Newmarket
AP132	TR17	I.R.
AP133	NKT677	Newmarket
AP133	TR17	I.R.
AP134	NKT677	Newmarket
AP134	TR17	I.R.
AP135	NKT677	Newmarket
AP136	NKT67	Newmarket
AP137	NKT677	Newmarket
AP142	NKT674	Newmarket
AP143	NKT675	Newmarket
AP144	NKT675	Newmarket
AP148	NKT676	Newmarket
AP150	NKT677	Newmarket
AC154	NKT271	Newmarket
AP156	NKT677	Newmarket
AP164	NKT674	Newmarket
AP165	NKT675	Newmarket
AP166	NKT675	Newmarket
AP168	NKT677	Newmarket
AP170	NKT676	Newmarket
AP185	NKT676	Newmarket
APZ11	TR17	I.R.
APZ12	TR18	I.R.
AP1	V10/1S-2	Newmarket
AP2	V10/1S-2	Newmarket
AP3	V10/1S-2	Newmarket
AP4	V10/1S-2	Newmarket
AP9	V10/50A-2	Newmarket
AP10	V30/20IP	Newmarket
AP11	V15/20R	Newmarket
AR4	2N242	Sylvania
AR5	2N242	Sylvania
AR5	TR-01	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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AR6	2N236B	Sylvania
AR6	TR-01	I.R.
AR7	2N236B	Sylvania
AR8	2N236B	Sylvania
AR8	TR-01	I.R.
AR9	2N399	Sylvania
AR9	TR-01	I.R.
AR10	NKT452S1	Newmarket
AR10	2N399	Sylvania
AR11	2N285A	Sylvania
AR12	TR-01	I.R.
ASY12	NKT221	Newmarket
ASY12	NKT228	Newmarket
ASY12	TR-05	I.R.
ASY13	NKT227	Newmarket
ASY24	NKT677	Newmarket
ASY26	2N1303	Texas
ASY26	NKT126	Newmarket
ASY26	ASY56	STC
ASY26	2GT102	Radiospares
ASY26	TR-06	I.R.
ASY27	2N1305	Texas
ASY27	ASY54,ASY57	STC
ASY27	2GT102	Radiospares
ASY27	TR-06	I.R.
ASY27	NKT125	Newmarket
ASY28	TR-08	I.R.
ASY28	2N1302	Texas
ASY29	TR-08	I.R.
ASY29	2N1304	Texas
ASY30	NKT677	Newmarket
ASY31	NKT126	Newmarket
ASY32	NKT125	Newmarket
ASY50	NKT215	Newmarket
ASY50	TK46C	Standard Tels.
ASY50	NKT272	Newmarket
ASY50	TR14	I.R.
ASY50	TR15	I.R.
ASY51	TK44C	Standard Tels.
ASY51	NKT217	Newmarket
ASY52	TK48C	Standard Tels.
ASY52	NKT217	Newmarket
ASY53	TK49C	Standard Tels.
ASY54	TK30D	Standard Tels.
ASY54	NKT125	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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ASY54	TR12	I.R.
ASY55	NKT125	Newmarket
ASY55	TK31D	Standard Tels.
ASY55	NKT124	Newmarket
ASY55	TR12	I.R.
ASY56	TK35C	Standard Tels.
ASY56	NKT126	Newmarket
ASY56	TR11	I.R.
ASY56	TR13	I.R.
ASY57	NKT126	Newmarket
ASY57	TK36C	Standard Tels.
ASY57	TR11	I.R.
ASY57	TR13	I.R.
ASY58	TR11	I.R.
ASY58	TR13	I.R.
ASY58	TK37C	Standard Tels.
ASY58	NKT125	Newmarket
ASY59	NKT124	Newmarket
ASY59	TR11	I.R.
ASY59	TR13	I.R.
ASY59	TK38C	Standard Tels.
ASY60	TK25C	Standard Tels.
ASY61	TK33C	Standard Tels.
ASY62	TK34C	Standard Tels.
ASY63	TK28C	Standard Tels.
ASY63	NKT214	Newmarket
ASY64	TK24C	Standard Tels.
ASY66	TK20C	Standard Tels.
ASY76	NKT228	Newmarket
ASY77	NKT227	Newmarket
ASY80	NKT228	Newmarket
ASZ15	NKT401	Newmarket
ASZ16	NKT402	Newmarket
ASZ16	NKT404	Newmarket
ASZ17	NKT404	Newmarket
ASZ18	NKT403	Newmarket
ASZ20	2G403	Texas
ASZ20	NKT603	Newmarket
ASZ21	2N710	G.E.C.
ASZ21	TR17	I.R.
ASZ21	TR18	I.R.
AT10H	TR-05	I.R.
AT10M	TR-04	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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AT10N	TR-04	I.R.
AT20H	TR-05	I.R.
AT20M	TR-05	I.R.
AT20N	TR-05	I.R.
AT30H	TR-05	I.R.
AT30M	TR-05	I.R.
AT/AP1	NKT204, 224	Newmarket
AT/AP1	TR-05	I.R.
AT/AP2	NKT203, 223	Newmarket
AT/AP2	TR-05	I.R.
AT/IP1	NKT133, 143	Newmarket
AT/RP1	NKT132, 142	Newmarket
AT/RP2	NKT131, 141	Newmarket
AT/S11	NKT123	Newmarket
AT/S12	NKT123	Newmarket
AT/S13	NKT122	Newmarket
AU101	AL100	A.T.E.S.
AU102	AL101	A.T.E.S.
AUY21	NKT402	Newmarket
B134	2N677A	Sylvania
B134A	2N677B	Sylvania
B134C	2N677C	Sylvania
B1017	TR-01	I.R.
B1017	TR-02	I.R.
BCZ11	2S323	Texas
BCZ11	2S303	Texas
BFI10	2S102	Texas
BFI10	BFI17, 2N1613	STC
BFI10	ZT42	Ferranti
BFI11	2S103	Texas
BFI11	BFI17, 2N1711	STC
BFI11	ZT43	Ferranti
BFI15	TK250A	Standard Tels.
BFI16	TK251A	Standard Tels.
BFI17	TK254A	Standard Tels.
BFI18	TK264A	Standard Tels.
BFI18	ZT81, ZT83	Ferranti

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BFY19	TK257A	Standard Tels.
BFY25	ZT697	Ferranti
BFY26	ZT83	Ferranti
BLY10	TK200A	Standard Tels.
BLY11	TK201A	Standard Tels.
BSY10	2S103	Texas
BSY10	ZT43	Ferranti
BSY10	BSY24, 2N2234	STC
BSY11	ZT44	Ferranti
BSY11	2S104	Texas
BSY11	BSY25, 2N2235	STC
BSY24	TK252A	Standard Tels.
BSY25	TK253A	Standard Tels.
BSY25	ZT2477	Ferranti
BSY26	ZT708	Ferranti
BSY26	TK255A	Standard Tels.
BSY26	ZT708	Ferranti
BSY27	TK256A	Standard Tels.
BSY27	ZT708	Ferranti
BSY28	TK258A	Standard Tels.
BSY29	ZT709	Ferranti
BSY29	ZT709	Ferranti
BSY29	TK259A	Standard Tels.
BSY38	BSY26, 2N706	STC
BSY39	BSY27, 2N753	STC
BSY39	2ST10	Radiospares
BUY11	TK203A	Standard Tels.
BUY10	TK202A	Standard Tels.
BY100	BY105	Thorn
BY101	BY114	Thorn
BY105	BY100	Thorn
BY114	BY101	Thorn
C63	BSY27, 2N708	STC
C63	ZT81	Ferranti
C64	ZT82	Ferranti
C64	2N914, 2N744	STC
C111	ZT80	Ferranti
C111	BSY27, BSY95A	STC
CDT1309	NKT402	Newmarket
CDT1309	NKT452	Newmarket

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CDT1310	NKT402	Newmarket
CDT1310	NKT451	Newmarket
CDT1311	NKT402	Newmarket
CDT1311	NKT404	Newmarket
CDT1312	NKT401	Newmarket
CDT1312	NKT403	Newmarket
CDT1319	NKT402	Newmarket
CDT1319	NKT404	Newmarket
CDT1320	NKT403	Newmarket
CDT1320	NKT404	Newmarket
CDT1321	NKT401	Newmarket
CDT1349	NKT404	Newmarket
CDT1349A	NKT404	Newmarket
CDT1350	NKT401	Newmarket
CDT1350A	NKT403	Newmarket
CK13	SPT107	CSF
CK13	2N413	Industro
CK14	2N414	Industro
CK14	SPT107	COSEM
CK16	2N416	Industro
CK17	SPT108	COSEM
CK17	2N417	Industro
CK22	2N422	Industro
CK22	TS3	STCA
CK22B	TR-05	I.R.
CK22C	TR-05	I.R.
CK25	2N425	Industro
CK26	2N426	Industro
CK27	2N427	Industro
CK28	2N428	Industro
CK64	2N464	Industro
CK64B	TR-05	I.R.
CK64C	TR-05	I.R.
CK65	TS2, TS13	STCA
CK65	2N465	Industro
CK65B	TR-05	I.R.

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CK65C	TR-05	I.R.
CK66	TS3	STCA
CK66	SFT153	COSEM
CK66	2N466	Industro
CK67	TS3	STCA
CK67	SFT153	COSEM
CK67	TS3	STCA
CK67	2N467	Industro
CK261	TR-05	I.R.
CK721	2N465	UST
CK721	TR-721	Industro
CK721	CK914	Raytheon
CK721	OC71	Rogers
CK721	TS2, TS13	STCA
CK721	TR-05	I.R.
CK722	UST722	UST
CK722	TS1	STCA
CK722	TR-05	I.R.
CK722	OC71	Rogers
CK722	CK914	Raytheon
CK722	TR-722	Industro
CK723	OC602	Telefunken
CK723	TS1, TS14	STCA
CK725	2N465	UST
CK725	TS3, TS13	STCA
CK725	OC71	Rogers
CK727	2N413	UST
CK727	TS1, TS14	STCA
CK727	OC71	Rogers
CK751	OC72	Rogers
CK751	2N185	STCA
CK754	2N185	STCA
CK754	SFT153	CSF
CK759	OC612	Telefunken
CK759	2N413, 2N519	Industro
CK759	OC45	Rogers
CK760	OC612	Telefunken
CK760	OC45	Rogers
CK760	TR-06	I.R.
CK760	2N414, 2N520	Industro
CK761	OC613	Telefunken
CK761	OC45	Rogers
CK761	2N189	RCA
CK761	2N416, 2N521	Industro
CK761	2N139	RCA
CK762	OC44	Rogers
CK762	2N417, 2N522	Industro
CK762	2N140	RCA
CK762	2N414	UST
CK766	TR-06	I.R.
CK766	OC44	Rogers

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CK766	2N482, 2N483	Industro
CK766	2N486	Raytheon
CK766	2N414	UST
CK766A	TR-06	I.R.
CK766A	2N484	Raytheon
CK766A	OC44	Rogers
CK768	TR-06	I.R.
CK872	TS3	STCA
CK878	2N185	STCA
CK790	OC200	Rogers
CK790	2N1034	Raytheon
CK791	2N1035	Raytheon
CK791	OC201	Rogers
CK793	2N1037	Raytheon
CK872	TR-05	I.R.
CK874	TS3, TS3-Z	STCA
CK878	TR-05	I.R.
CK879	TR-05	I.R.
CK882	2N360, 2N361	Industro
CK882	TR-05	I.R.
CK888	TR-05	I.R.
CK896A	OC57	Rogers
CK897A	OC58	Rogers
CK898A	OC59	Rogers
CT1122	TR-01	I.R.
CT1223	TR-04	I.R.
CT1124	TR-01	I.R.
CT1124B	TR-01	I.R.
CTP1003	OC28	Rogers
CTP1004	2N1314	Rogers
CTP1005	2N1314	Rogers
CTP1006	OC29	Rogers
CTP1104	TR-01	I.R.
CTP1104	2N1314	Rogers
CTP1104	2N235A	Bendix
CTP1104	2N301	RCA
CTP1104	2N256	Sylvania
CTP1105	2N235A	Bendix

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CTP1108	2N234A	Bendix
CTP1108	2N265	Sylvania
CTP1108	2N1314	Rogers
CTP1108	TR-01	I.R.
CTP1108	TR-02	I.R.
CTP1109	2N1314	Rogers
CTP1109	2N234A	Bendix
CTP1109	2N301	RCA
CTP1109	TR-01	I.R.
CTP1109	TR-02	I.R.
CTP1111	NKT401	Newmarket
CTP1111	2N639A	Bendix
CTP1111	OC28	Rogers
CTP1117	2N236B	Sylvania
CTP1117	2N236A	Bendix
CTP1117	TR-01	I.R.
CTP1124	TR-01	I.R.
CTP1137	2N637	Bendix
CTP1137	TR-01	I.R.
CTP1137	2N176	Sylvania
CTP1265	NKT400	Newmarket
CTP1266	NKT400	Newmarket
CTP1296	NKT401	Newmarket
CTP1297	NKT401	Newmarket
CTP1306	NKT400	Newmarket
CTP1307	NKT400	Newmarket
CTP1500	2N677C	Sylvania
CTP1501	2N1031C	Bendix
CTP1503	2N1031C	Bendix
CTP1503	2N677B	Sylvania
CTP1504	2N677B	Sylvania
CTP1504	2N1031B	Bendix
CTP1505	2N1031C	Bendix
CTP1505	2N677A	Sylvania
CTP1506	2N1031	Bendix
CTP1507	2N1031	Bendix
CTP1508	2N1031A	Bendix
CTP1509	2N1031	Bendix
CTP1509	2N677	Sylvania
CTP1511	2N1031C	Bendix
CTP1512	2N1031C	Bendix
CTP1512	2N677C	Sylvania

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CTP1513	2N1031B	Bendix
CTP1514	2N1031A	Bendix
CV2389	GET114	G.E.C.
CV2389	V10/30A	Newmarket
CV2400	GET106	G.E.C.
CV2400	V10/30A-3	Newmarket
CV7001	ACT31	STC
CV7001	2G303	Texas
CV7001	GET103	G.E.C.
CV7001	V10/50A-2	Newmarket
CV7002	V30/20IP	Newmarket
CV7002	2G382	Texas
CV7002	GET116	G.E.C.
CV7003	V6/8R-2	Newmarket
CV7003	GET874	G.E.C.
CV7003	2G302	Texas
CV7003	ASI55	STC
CV7004	GET873	G.E.C.
CV7004	2G301	Texas
CV7004	ASI54	STC
CV7004	V6/2R-2	Newmarket
CV7005	2G371	Texas
CV7005	GET103	G.E.C.
CV7005	V10/30A-2	Newmarket
CV7006	V10/50A-2	Newmarket
CV7006	GET103	G.E.C.
CV7006	2N374	Texas
CV7007	GET111	G.E.C.
CV7007	V10/50A-2	Newmarket
CV7007	2G377	Texas
CV7008	V10-50A-3	Newmarket
CV7008	GET106	G.E.C.
CV7009	V60/20IP	Newmarket
CV7009	GET110	G.E.C.
CV7010	V30/30P	Newmarket
CV7011	V60/30P	Newmarket
CV7012	V60/30P	Newmarket
CV7042	TK29B	S.T.C.
CV7042	ASI63	STC
CV7042	2G302	Texas
CV7043	2S322	Texas
CV7044	2S323	Texas
CV7056	2S002	Texas
CV7057	2S003	Texas

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CV7058	2S004	Texas
CV7059	2S005	Texas
CV7060	2S014	Texas
CV7061	2S012A	Texas
CV7062	2S017	Texas
CV7063	2S018	Texas
CV7064	2S019	Texas
CV7065	2S020	Texas
CV7066	2S013A	Texas
CV7074	GEF103	G.E.C.
CV7075	OC201	Mullard
CV7075	2S323	Texas
CV7080	GEI571	G.E.C.
CV7081	GEI572	G.E.C.
CV7082	GEI573	G.E.C.
CV7083	OC29	Mullard
CV7083	NKT402	Newmarket
CV7084	OC35	Mullard
CV7084	NKT404	Newmarket
CV7085	NKT401	Newmarket
CV7086	NKT403	Newmarket
CV7087	2G306	Texas
CV7089	2G401	Texas
CV7107	AGY31	STC
CV7131	2N1564	Texas
CV7132	2N1565	Texas
CV7133	2N1564	Texas
CV7134	2N1564	Texas
CV7149	2S302	Texas
CV7151	2S303	Texas
CV7152	2S301	Texas
CV7154	2S103	Texas
CV7185	AST66	STC

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CV7326	2G377	Texas
CV7327	2G371	Texas
CV7328	2S104	Texas
CV7333	2S025	Texas
CV7334	2S026	Texas
CV7336	2N743	Texas
CV7337	2S131	S.G.S.
CV7337	2N744	Texas
CV7341	2S300	Texas
CV7342	2S300	Texas
CV7343	2S300	Texas
CV7344	2S300	Texas
CV7345	2S300	Texas
CV7346	2S300	Texas
CV7348	2N1302	Texas
CV7349	2N1304	Texas
CV7350	2N1306	Texas
CV7351	2N1308	Texas
CV7352	2N1303	Texas
CV7353	2N1305	Texas
CV7354	2N1307	Texas
CV7355	2N1309	Texas
CV7361	BUY11	STC
CV7362	BSY25	STC
CV7362	2N2217	Texas
CV7363	2S320	Texas
CV7366	2S305	Texas
CV7371	2N2220	Texas
CV7372	2N2221	Texas
CV7379	2N916	S.G.S.
CV7390	2G102	Texas
CV7391	2G110	Texas

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CV7393	2N705	Texas
CV7394	2N711	Texas
CV7396	2S307	Texas
CV7404	2N1893	S.G.S.
CV7430	BSY26	S.G.S.
CV7431	BSY27	S.G.S.
CV7431	2N753	Texas
CV7440	2N1613	S.G.S.
CV7448	AST60	STC
CV7459	2S300	Texas
CV7461	2S103	Texas
CV7462	2N2411	Texas
CV7463	2N2412	Texas
CV7464	2N706A	Texas
CV7477	C63	S.G.S.
CV7478	2N918	S.G.S.
CV7479	2N2060	S.G.S.
CV7490	BFY17	STC
CV7491	BFY18	STC
CV7492	2N929	S.G.S.
CV7493	2N930	S.G.S.
CV7495	2N696	S.G.S.
CV7496	2N697	S.G.S.
CV7497	C64	S.G.S.
CV7554	2N2475	S.G.S.
CV7555	2N2369A	S.G.S.
CV7580	2N1131	Texas
CV7581	2N1132	Texas
CV7588	2S104	Texas
CV7588	2S104P	S.G.S.
CV7596	2S103	Texas
CV7598	2S301	Texas
CV7629	2S024	Texas
CV7630	2N2696	Texas

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CV7631	2N2904	Texas
CV7648	BSY95A	STC
CV8414	DT1121	Lucas
CV8415	DT1111	Lucas
CV8416	DT1112	Lucas
CV8424	DT4111	Lucas
CV8615	BSY95A	STC
DR100	TS1,TS14	STCA
DR101	TS1	STCA
DR102	TS2,TS14	STCA
DR108	TS1	STCA
DR109	TS1,TS14	STCA
DR110	TS3	STCA
DR126	2N465	UST
DR126	TS1,TS14	STCA
DR127	TS2,TS14	STCA
DR128	2N465	UST
DR129	2N465	UST
DR129	TS2,TS14	STCA
DR130	TS1	STCA
DR131	TS1	STCA
DS14	TR-05	I.R.
DS16	TR-05	I.R.
DS19	TR-06	I.R.
DS21	TR-06	I.R.
DS22	TR-06	I.R.
DS24	TR-06	I.R.
DS501	TR-03	I.R.
DS503	TR-01	I.R.
DS504	TR-03	I.R.
DS505	TR-03	I.R.
DS506	TR-03	I.R.
DS520	TR-01	I.R.

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DS525	TR-03	I.R.
DT80	CTP-1502	Clevite
DT80	2N1031B	Bendix
DT80	2N677C	Sylvania
DT100	2N1031C	Bendix
DT100	2N677C	Sylvania
DT100	CTP-1500	Clevite
DT1111	ZT1479	Ferranti
DT1112	ZT1480	Ferranti
DT1121	ZT1481	Ferranti
DT1122	ZT1482	Ferranti
DT1511	ZT1700	Ferranti
DT1521	ZT2270	Ferranti
DT4111	ZT1488	Ferranti
DT4121	ZT1490	Ferranti
ED46	TR-09	I.R.
ED52	TR-06	I.R.
ED53	TR-07	I.R.
ED54B	TR-07	I.R.
ED55	TR-04	I.R.
ED55	TR-05	I.R.
ED56	TR-04	I.R.
ED56	TR-05	I.R.
ED57	TR-05	I.R.
ET1	TR-06	I.R.
ET2	TR-07	I.R.
ET3	TR-04	I.R.
ET4	TR-05	I.R.
ET5	TR-05	I.R.
ET6	TR-01	I.R.
ET7	TR-03	I.R.
ET8	TR-08	I.R.
ET9	TR10	I.R.
ET10	TR-09	I.R.
ET11	TR-09	I.R.

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ET12	TR17	I.R.
EW53	TS1,TS14	STCA
EW58	TS2,TS14	STCA
EW59	TS2,TS14	STCA
FST2/8	BY100,BY105	Thorn
GE1	TR-06	I.R.
GE2	TR-05	I.R.
GE3	TR-01	I.R.
GE4	TR-03	I.R.
GE6	TR-08	I.R.
GE7	TR10	I.R.
GE8	TR-09	I.R.
GE9	TR17	I.R.
GET3	V10/50A-1	Newmarket
GET3	2GT174	Radio spares
GET3	2N185, TS3	STCA
GET3	NKT224	Newmarket
GET3	TR-05	I.R.
GET4	NKT228	Newmarket
GET4	V10/50A-2	Newmarket
GET4	TR-05	I.R.
GET4	2N185, TS13	STCA
GET5	NKT304	Newmarket
GET5	V30/20IP	Newmarket
GET6	NKT226	Newmarket
GET6	V10/50A-3	Newmarket
GET6	2N185, TS3	STCA
GET7	V15/30NP	Newmarket
GET8	V30/30NP	Newmarket
GET9	NKT401	Newmarket
GET15	V15/20IP-1	Newmarket
GET16	V30/20IP	Newmarket
GET20	V30/20IP	Newmarket
GET102	TR-05	I.R.
GET102	V10/50A-2	Newmarket
GET102	NKT223	Newmarket
GET102	AC156	Thorn
GET102	ASY59	STC
GET102	2G304	Texas
GET103	TR-05	I.R.
GET103	NKT224	Newmarket

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GET103	ACT30, ASI58	STC
GET103	V10/30A-2	Newmarket
GET103	2GT182	Radiospares
GET103	2G303	Texas
GET104	2G303	Texas
GET104	TR-05	I.R.
GET104	2GT182	Radiospares
GET104	NKT228	Newmarket
GET104	NKT203	Newmarket
GET104	V10/30A-2	Newmarket
GET104	ACT30, ASI59	STC
GET105	NKT304	Newmarket
GET105	V60/20IP-1	Newmarket
GET106	NKT226	Newmarket
GET106	V10/30A-3	Newmarket
GET106	TR-05	I.R.
GET106	ACT29	STC
GET110	V60/20IP-1	Newmarket
GET110	NKT303	Newmarket
GET111	NKT227	Newmarket
GET111	V10/50A-2	Newmarket
GET111	ACT30	STC
GET111	TR-05	I.R.
GET111	2G377	Texas
GET113	NKT264	Newmarket
GET113	V10/50A-1	Newmarket
GET113	NKT203	Newmarket
GET113	2G301	Texas
GET113	ACT30	STC
GET113	AC113	Thorn
GET113	NKT271	Newmarket
GET114	NKT274	Newmarket
GET114	V10/30A-1	Newmarket
GET114	NKT224	Newmarket
GET114	TR-05	I.R.
GET114	NKT203	Newmarket
GET114	2GT182	Radiospares
GET114	2G301	Texas
GET114	NKT262	Newmarket
GET114	ACT30	STC
GET115	NKT351	Newmarket
GET115	NKT304	Newmarket
GET115	V15/20IP-1	Newmarket
GET116	V30/20IP-1	Newmarket
GET116	NKT304	Newmarket
GET120	NKT303	Newmarket
GET120	V30/20IP-1	Newmarket
GET535	TR-05	I.R.
GET535	NKT228	Newmarket
GET536	NKT228	Newmarket
GET536	TR-05	I.R.
GET538	NKT227	Newmarket
GET571	V5/30NP	Newmarket

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GET571	2N456	Texas
GET571	NKT404	Newmarket
GET572	V30/30NP	Newmarket
GET572	2N456	Texas
GET572	NKT404	Newmarket
GET573	NKT403	Newmarket
GET573	V60/30NP	Newmarket
GET573	2N457	Texas
GET574	NKT403	Newmarket
GET581	NKT401	Newmarket
GET582	NKT403	Newmarket
GET583	NKT404	Newmarket
GET584	NKT402	Newmarket
GET870	NKT216	Newmarket
GET870	ASI54, ASI55	STC
GET871	V10/2SC	Newmarket
GET871	2G301	Texas
GET871	2G301	Texas
GET871	NKT106	Newmarket
GET871	ASI54, ASI57	STC
GET871	NKT126	Newmarket
GET871	TR13	I.R.
GET872	NKT125	Newmarket
GET872	V10/18C	Newmarket
GET872	V6/2R-2	Newmarket
GET872	NKT105	Newmarket
GET872	2G302	Texas
GET872	ASI55, ASI58	STC
GET872	TR11	I.R.
GET872	2G302	Texas
GET873	2G301	Texas
GET873	V6/2R-2	Newmarket
GET873	NKT133	Newmarket
GET873	V6/4R-2	Newmarket
GET873	2G301	Texas
GET873	ASI54	STC
GET873	TR13	I.R.
GET873	NKT142	Newmarket
GET873	NKT73	Newmarket
GET874	2G302	Texas
GET874	NKT141	Newmarket
GET874	NKT73	Newmarket
GET874	V6/8R-2	Newmarket
GET874	V6/4R-2	Newmarket
GET874	NKT132	Newmarket
GET874	2G302	Texas
GET874	ASI55	STC
GET874	TR11	I.R.
GET875	2G303	Texas
GET875	NKT104	Newmarket
GET875	2GT102	Radiospares
GET875	2G306	Texas
GET875	NKT124	Newmarket

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GET876	NKT134	Newmarket
GET880	2GT102	Radiospares
GET880	NKT216	Newmarket
GET880	ACI29	STC
GET881	NKT126	Newmarket
GET881	ASY57,ASY54	STC
GET881	TR-07	I.R.
GET881	2G301,2N1303	Texas
GET882	NKT125	Newmarket
GET882	ASY58,ASY55	STC
GET882	TR-07	I.R.
GET882	2G302,D535	Texas
GET883	NKT133	Newmarket
GET883	2N1309	Texas
GET884	NKT132	Newmarket
GET885	NKT124	Newmarket
GET885	TR-07	I.R.
GET886	NKT134	Newmarket
GET887	2GT102	Radiospares
GET887	NKT129	Newmarket
GET887	ASY54	STC
GET887	TR-06	I.R.
GET888	ASY55	STC
GET888	NKT127	Newmarket
GET888	TR-06	I.R.
GET889	ASY54	STC
GET889	TR-06	I.R.
GET889	2GT102	Radiospares
GET889	NKT128	Newmarket
GET890	NKT127	Newmarket
GET890	TR-06	I.R.
GET890	ASY55	STC
GET891	ASY57,ASY54	STC
GET891	NKT126	Newmarket
GET891	TR-06	I.R.
GET891	2G301,2N1303	Texas
GET892	2G302,D535	Texas
GET892	NKT125	Newmarket
GET892	TR-06	I.R.
GET892	ASY58,ASY55	STC
GET895	TR-06	I.R.
GET895	NKT124	Newmarket
GET896	NKT143	Newmarket
GET896	TR-05	I.R.
GET897	TR-05	I.R.
GET897	NKT142	Newmarket
GET898	NKT141	Newmarket
GET898	TR-05	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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GFT20	OC303	Intermetall
GFT21	OC304	Intermetall
GFT44	OC410	Intermetall
GFT45	OC390	Intermetall
GFT2006	CTP1108	Intermetall
GFT2006/30	CTP1104	Intermetall
GFT2006/60	CTP1111	Intermetall
GFT4012/30	2N257	Intermetall
GFT4012/60	2N268	Intermetall
GM378	TR18	I.R.
GT1	NKT275	Newmarket
GT1	GET114	G.E.C.
GT1	V10/15A	Newmarket
GT2	V10/30A	Newmarket
GT2	NKT274	Newmarket
GT2	GET114	G.E.C.
GT3	V10/50A	Newmarket
GT3	GET114	G.E.C.
GT3	NKT271	Newmarket
GT11	V6/2R-1	Newmarket
GT11	GET873	G.E.C.
GT11	NKT73	Newmarket
GT12	V6/4R-1	Newmarket
GT12	GET873	G.E.C.
GT12	NKT73	Newmarket
GT13	V6/8R-1	Newmarket
GT13	NKT72	Newmarket
GT13	GET874	G.E.C.
GT14	OC72	Rogers
GT14	2N464,2N465	Industro
GT14H	2N464	Industro
GT20	2N109	Sylvania
GT20	2N465	Industro
GT20	OC72	Rogers
GT20H	2N465	Industro
GT20R	TR-05	I.R.
GT31	V10/15A	Newmarket
GT31	TR-05	I.R.
GT31	NKT225	Newmarket
GT31	NKT215	Newmarket
GT32	NKT214	Newmarket
GT32	GET114	G.E.C.
GT32	NKT224	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
GT32	V10/30A	Newmarket
GT32	TR-05	I.R.
GT33	GET113	G.E.C.
GT33	TR-05	I.R.
GT33	NKT213	Newmarket
GT33	V10/50A	Newmarket
GT33	NKT223	Newmarket
GT34	TR-34, 2N464	Industro
GT38	OC71	Rogers
GT41	GET873	G.E.C.
GT41	V6/2R-2	Newmarket
GT41	V6/7R-2	Newmarket
GT41	NKT173	Newmarket
GT41	NKT143	Newmarket
GT41	2G301	Texas
GT42	NKT142	Newmarket
GT42	GET873	G.E.C.
GT42	V6/4R-2	Newmarket
GT42	2G302	Texas
GT42	NKT173	Newmarket
GT43	GET874	G.E.C.
GT43	V6/8R-2	Newmarket
GT43	NKT172	Newmarket
GT43	2G302	Texas
GT43	NKT141	Newmarket
GT44	NKT126	Newmarket
GT45	NKT126	Newmarket
GT46	NKT125	Newmarket
GT47	NKT124	Newmarket
GT74	2N466	Industro
GT75	2N467	Industro
GT81	TR81, 2N362	Industro
GT81	OC72	Rogers
GT81H	2N467	Industro
GT81R	TR-05	I.R.
GT82	2N467	Industro
GT87	TR-722	Industro
GT88	2N466	Industro
GT100	V6/4R-1	Newmarket
GT109	2N109	RCA
GT109	2N632, 2N633	Industro
GT109	OC72	Rogers
GT109	TR-05	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
GT122	2N360	Industro
GT122	OC76	Rogers
GT123	TR123, 2N426	Industro
GT132	TR-05	I.R.
GT222	OC71	Rogers
GT222	TR-04	I.R.
GT222	TR-05	I.R.
GT269	2N404, TR269	Industro
GT751	TR-05	I.R.
GT758	2N464	Industro
GT759	2N425	Industro
GT759	OC45	Rogers
GT759R	2N481, 2N482	Industro
GT760	2N520, 2N426	Industro
GT760	OC45	Rogers
GT760	TR-07	I.R.
GT760R	2N482, 2N483	Industro
GT760R	TR-07	I.R.
GT761	2N521, 2N427	Industro
GT761	OC45	Rogers
GT761	2N140	RCA
GT761	2N139	RCA
GT761	TR-07	I.R.
GT761R	2N483, 2N485	Industro
GT761R	TR-06	I.R.
GT762	2N485, 2N522	Industro
GT762	OC44	Rogers
GT762	2N140	RCA
GT762R	2N484, 2N486	Industro
GT763	2N523, 2N428	Industro
GT764	2N428	Industro
GT766	TR-06	I.R.
GT832	2N215	Sylvania
GT1223	TR-05	I.R.
HP3M	TR-07	I.R.
HPGM	TR-07	I.R.
HP12H	TR-06	I.R.
HP12M	TR-06	I.R.
HJ15	TR-05	I.R.
HJ15	TR14	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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HJ15D	TR14	I.R.
HJ17	TR-05	I.R.
HJ17	TR15	I.R.
HJ17D	TR-05	I.R.
HP17D	TR15	I.R.
HP20H	TR-06	I.R.
HJ22	TR-07	I.R.
HJ22	TR13	I.R.
HJ22D	TR-07	I.R.
HJ22D	TR13	I.R.
HJ23	TR-06	I.R.
HJ23D	TR-06	I.R.
HJ34	TR15	I.R.
HJ34A	TR15	I.R.
HJ50	TR13	I.R.
HJ54	TR-07	I.R.
HJ55	TR13	I.R.
HJ60	TR-06	I.R.
HJ62	TR-07	I.R.
HJ228	TR13	I.R.
HJ230	TR-06	I.R.
HJ315	TR-05	I.R.
HJ2	TR-06	I.R.
HP54	TR13	I.R.
HS15	TR-05	I.R.
HS17D	TR-05	I.R.
HS17D	TR15	I.R.
HS22D	TR-05	I.R.
HS22D	TR13	I.R.
HS23D	TR-05	I.R.
HV15	TR-05	I.R.
HV16	TR-05	I.R.
JP40	TR15	I.R.
JR10	TR13	I.R.
JR30	TR11	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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JR100	TR17	I.R.
JR200	TR18	I.R.
LT11	CK311	Raytheon
LT12	CK312	Raytheon
LT13	CK313	Raytheon
LT14	CK314	Raytheon
LT15	CK315	Raytheon
LT5163	2N1294	C.B.S.
LT5164	2N1296	C.B.S.
LT5164A	2N1298	C.B.S.
LT5165	2N1292	C.B.S.
LT5191	2N1291	C.B.S.
LT5192	2N1293	C.B.S.
LT5193	2N1295	C.B.S.
LT5193A	2N1297	C.B.S.
MA393	V15/20R	Newmarket
MC101	TR-06	I.R.
MD501	2N710	G.E.C.
MDS33	2N964	Texas
MN25	TR-01	I.R.
MN29	TR-01	I.R.
MN32	2N235A	Sylvania
MN32	2N235A	Bendix
MN53	TR-04	I.R.
MN53	TR-05	I.R.
MN73	TR-01	I.R.
NA20	TR-09	I.R.
NA30	TR-09	I.R.
NKT52	NKT72	Newmarket
NKT53	NKT73	Newmarket
NKT54	NKT73	Newmarket
NKT62	NKT72	Newmarket
NKT63	NKT73	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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NKT64	NKT73	Newmarket
NKT74	NKT73	Newmarket
NKT121	TR13	I.R.
NKT122	2GT102	Radiospares
NKT122	TR13	I.R.
NKT123	2GT102	Radiospares
NKT123	TR13	I.R.
NKT124	TR13	I.R.
NKT124	2N1309	Texas
NKT125	2N1305	Texas
NKT125	2GT102	Radiospares
NKT125	TR13	I.R.
NKT126	2GT102	Radiospares
NKT126	TR13	I.R.
NKT126	2N1703	Texas
NKT127	2N1309	Texas
NKT127	TR13	I.R.
NKT128	2N1305	Texas
NKT128	2GT102	Radiospares
NKT128	TR13	I.R.
NKT129	2N1703	Texas
NKT129	2GT102	Radiospares
NKT129	TR13	I.R.
NKT141	TR13	I.R.
NKT142	2GT102	Radiospares
NKT143	2GT102	Radiospares
NKT143	TR13	I.R.
NKT152	NKT162	Newmarket
NKT152C	NKT162	Newmarket
NKT153	NKT163	Newmarket
NKT153/25	NKT163	Newmarket
NKT153/25B	NKT163	Newmarket
NKT153/25C	NKT163	Newmarket
NKT153A	NKT163	Newmarket
NKT153B	NKT163	Newmarket
NKT154	NKT164	Newmarket
NKT154A	NKT164	Newmarket
NKT154B	NKT164	Newmarket
NKT154R	NKT164	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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NKT154/25	NKT164	Newmarket
NKT154/25B	NKT164	Newmarket
NKT154/25C	NKT164	Newmarket
NKT162	TR-06	I.R.
NKT162	2GT102	Radiospares
NKT163	NKT163	Newmarket
NKT163/25	TR-07	I.R.
NKT163/25	NKT163	Newmarket
NKT163/25B	NKT163	Newmarket
NKT163Z/25	NKT163	Newmarket
NKT164	NKT164	Newmarket
NKT164/25	TR-07	I.R.
NKT164/25	NKT164	Newmarket
NKT164/25B	NKT164	Newmarket
NKT164Z/25	NKT164	Newmarket
NKT172	NKT162	Newmarket
NKT173	NKT163	Newmarket
NKT173	2G371	Texas
NKT174	NKT164	Newmarket
NKT182	NKT162	Newmarket
NKT183	NKT163	Newmarket
NKT184	NKT164	Newmarket
NKT211	TR15	I.R.
NKT212	TR15	I.R.
NKT212	2G303	Texas
NKT213	TR15	I.R.
NKT213	2G374	Texas
NKT214	TR15	I.R.
NKT214	2G371	Texas
NKT215	TR15	I.R.
NKT215	2G371	Texas
NKT216	TR14	I.R.
NKT216	2G374	Texas
NKT217	2G377	Texas
NKT218	TR15	I.R.
NKT221	TR-05	I.R.
NKT222	2GT182	Radiospares

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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NKT223	TR-05	I.R.
NKT223	AC156	Thorn
NKT224	TR-05	I.R.
NKT225	TR-05	I.R.
NKT228	TR-05	I.R.
NKT250	NKT274	Newmarket
NKT251	NKT271	Newmarket
NKT251/763	NKT271,773	Newmarket
NKT251/773	NKT271,773	Newmarket
NKT251A	NKT271	Newmarket
NKT252	NKT274	Newmarket
NKT252A	NKT274	Newmarket
NKT253	NKT271	Newmarket
NKT254	NKT274	Newmarket
NKT254A	NKT274	Newmarket
NKT255	NKT275	Newmarket
NKT255A	NKT275	Newmarket
NKT255E	NKT275	Newmarket
NKT255J	NKT275	Newmarket
NKT257/751	NKT27,773	Newmarket
NKT258	NKT274	Newmarket
NKT260	NKT274	Newmarket
NKT261	TR-04	I.R.
NKT261	NKT271	Newmarket
NKT261/753	NKT271,773	Newmarket
NKT261/763	NKT271,773	Newmarket
NKT261/773	NKT271,773	Newmarket
NKT261A	NKT271	Newmarket
NKT262	TR-04	I.R.
NKT262	NKT274	Newmarket
NKT262A	NKT274	Newmarket
NKT263	TR-04	I.R.
NKT263	NKT271	Newmarket
NKT264	TR-04	I.R.
NKT264	NKT274	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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NKT265	NKT275	Newmarket
NKT265A	NKT275	Newmarket
NKT265E	NKT275	Newmarket
NKT265J	NKT275	Newmarket
NKT268	NKT274	Newmarket
NKT270	NKT274	Newmarket
NKT271	2GT182	Radiospares
NKT271	TR15	I.R.
NKT271	AC154	Thorn
NKT271	2G302	Texas
NKT271	NKT271	Newmarket
NKT271/753	NKT271,773	Newmarket
NKT271/763	NKT271,773	Newmarket
NKT271A	NKT271	Newmarket
NKT272	2GT182	Radiospares
NKT272	NKT274	Newmarket
NKT272	AC113	Thorn
NKT272	2G371	Texas
NKT272	TR14	I.R.
NKT272A	NKT274	Newmarket
NKT273	TR15	I.R.
NKT273	NKT271	Newmarket
NKT273/774	NKT271,773	Newmarket
NKT274	2GT182	Radiospares
NKT274	TR14	I.R.
NKT275	2G371	Texas
NKT275A	NKT275	Newmarket
NKT275E	NKT275	Newmarket
NKT275J	NKT275	Newmarket
NKT277/751	NKT271,773	Newmarket
NKT277/771	NKT271,773	Newmarket
NKT278	NKT274	Newmarket
NKT352	TR16	I.R.
NKT361	TR16	I.R.
NKT362	TR16	I.R.
NKT403	AD140	Thorn
NKT450	NKT452	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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NKT451	TR-01	I.R.
NKT451	2PGT14	Radiospares

NKT452	2PGT14	Radiospares
NKT452	TR-01	I.R.

NKT453	TR-01	I.R.
NKT453	NKT452	Newmarket
NKT453	2PGT13	Radiospares

NKT675	2GT117	Radiospares
NKT675	TR17	I.R.

NKT676	TR17	I.R.
NKT676	2GT117	Radiospares

NKT677	TR12	I.R.
NKT677	2GT117	Radiospares

NKT713	TR-09	I.R.
NKT713	AC157	Thorn

NKT751	NKT773	Newmarket
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NKT773	TR-09	I.R.
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NKT774	TR-09	I.R.
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NKT2711	2G374	Texas
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NR5	TR-09	I.R.
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NR10	TR10	I.R.
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OC14	NKT224	Newmarket
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OC16	NKT452	Newmarket
OC16	NKT453	Newmarket
OC16	TR-01	I.R.
OC16	2PGT14	Radiospares
OC16	2N257	Intermetall
OC16	GET8	G.E.C.
OC16	V30/30P	Newmarket

OC16R	V60/20P	Newmarket
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OC16T	V60/20P	Newmarket
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OC16W	V30/30P	Newmarket
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OC16X	V30/30P	Newmarket
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OC19	NKT452	Newmarket
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OC19	NKT453	Newmarket
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OC19	V30/30NP	Newmarket
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OC22	GET120	G.E.C.
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OC25	2PGT7	Radiospares
OC25	NKT452	Newmarket
OC25	NKT453	Newmarket

OC26	2PGT14	Radiospares
OC26	AD143	A.T.E.S.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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OC26	AD149	Siemen
OC26	AD143	A.T.E.S.
OC26	V30/30NP	Newmarket
OC26	NKT451	Newmarket
OC26	NKT452	Newmarket
OC26	AD142	A.T.E.S.

OC27	AD142	A.T.E.S.
OC27	NKT451	Newmarket

OC28	GET573	G.E.C.
OC28	V30/30NP	Newmarket
OC28	NKT401	Newmarket
OC28	2G210	Texas

OC29	2N457	Texas
OC29	NKT402	Newmarket
OC29	2PGT7	Radiospares

OC30	GET116	G.E.C.
OC30	NKT303	Newmarket
OC30	CTP1104	Intermetall
OC30	V30/20IP	Newmarket

OC32	NKT274	Newmarket
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OC33	NKT213	Newmarket
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OC34	NKT213	Newmarket
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OC35	2PGT7	Radiospares
OC35	V30/30NP	Newmarket
OC35	NKT404	Newmarket
OC35	GET572	G.E.C.
OC35	GET572	G.E.C.
OC35	2N456	Texas

OC36	2N457	Texas
OC36	NKT403	Newmarket

OC37	NKT212	Newmarket
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OC38	TR15	I.R.
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OC41	NKT126	Newmarket
OC41	GET871	G.E.C.
OC41	V10/2S	Newmarket
OC41	2G301	Texas
OC41	NKT106	Newmarket
OC41	ASY56, ASY57	STC
OC41	2GT102	Radiospares
OC41	TR13	I.R.

OC42	TR12	I.R.
OC42	2G302	Texas
OC42	2GT102	Radiospares
OC42	GET872	G.E.C.
OC42	V10/1S	Newmarket
OC42	NKT105	Newmarket
OC42	NKT125	Newmarket
OC42	ASY57, ASY58	STC

OC43	GET875	G.E.C.
OC43	2G306	Texas
OC43	NKT773	Newmarket
OC43	NKT104	Newmarket
OC43	NKT124	Newmarket
OC43	TR11	I.R.
OC43	ASY58	STC

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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OC44	2GT102	Radiospares
OC44	OC410	Intermetall
OC44	GET874	G.E.C.
OC44	NKT172	Newmarket
OC44	NKT132	Newmarket
OC44	NKT141	Newmarket
OC44	2N219	Hitachi
OC44	OC410	Intermetall
OC44	V6/8R-2	Newmarket
OC44	2G344	Texas
OC44	TR-C44, 2N486	Industro
OC44	2G302	Texas
OC44	TR-06	I.R.
OC44	ASI55	STC

OC44M	NKT172	Newmarket
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OC45	2GT102	Radiospares
OC45	ASI54	STC
OC45	OC390	Intermetall
OC45	GET873	G.E.C.
OC45	TR-C45, 2N483	Industro
OC45	2G345	Texas
OC45	TR11	I.R.
OC45	TR-07	I.R.
OC45	NKT133	Newmarket
OC45	NKT173	Newmarket
OC45	OC390	Intermetall
OC45	2N218	Hitachi
OC45	V6/4R-2	Newmarket
OC45	2G301	Texas
OC45	NKT142	Newmarket

OC45M	NKT173	Newmarket
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OC46	NKT126	Newmarket
OC46	TR13	I.R.

OC47	TR13	I.R.
OC47	NKT125	Newmarket

OC57	NKT272	Newmarket
OC57	V10/30A-3	Newmarket

OC58	V10/50A-3	Newmarket
OC58	NKT274	Newmarket

OC59	V10/50A-3	Newmarket
OC59	NKT274	Newmarket

OC60	NKT274	Newmarket
OC60	V10/50A	Newmarket

OC65	2N465	Industro
OC65	OC340	Intermetall
OC65	TR15	I.R.
OC65	V10/30A	Newmarket
OC65	ASI50, ACI28	STC
OC65	NKT272	Newmarket

OC66	NKT272	Newmarket
OC66	TR15	I.R.
OC66	OC340	Intermetall
OC66	2N466	Industro
OC66	V10/50A	Newmarket
OC66	ACI27, ACI28	STC
OC66	2GT174	Radiospares

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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OC70	NKT215	Newmarket
OC70	NKT225	Newmarket
OC70	NKT205	Newmarket
OC70	GET103	G.E.C.
OC70	OC303	Intermetall
OC70	TR-C70, 2N363	Industro
OC70	V10/15A-2	Newmarket
OC70	NKT275	Newmarket
OC70	2GT182	Radiospares
OC70	ACI34, ACI27	STC
OC70	2G371	Texas
OC70	TR14	I.R.

OC71	ACI55	Thorn
OC71	2G371	Texas
OC71	GET103	G.E.C.
OC71	ACI34	A.T.E.S.
OC71	TR-C71, 2N362	Industro
OC71	GET114	G.E.C.
OC71	NKT224	Newmarket
OC71	OC304	Intermetall
OC71	2N215	Hitachi
OC71	ACI35	
OC71	TR-05	I.R.
OC71	TR14	I.R.
OC71	V10/30A-2	Newmarket
OC71	NKT204	Newmarket
OC71	NKT214	Newmarket
OC71	NKT275	Newmarket
OC71	2GT182	Radiospares

OC72	2GT182	Radiospares
OC72	TR-C72, 2N632	Industro
OC72	GET114	G.E.C.
OC72	NKT203	Newmarket
OC72	NKT222	Newmarket
OC72	NKT212	Newmarket
OC72	NKT271	Newmarket
OC72	2N217	Hitachi
OC72	ACI35	A.T.E.S.
OC72	2G378	Texas
OC72	ACI36	A.T.E.S.
OC72	OC307	Intermetall
OC72	V10/50A-2	Newmarket
OC72	ACI36	STC
OC72	TR15	I.R.
OC72	TR-05	I.R.
OC72	GET103	G.E.C.

OC72M	TR-C72M	Industro
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OC73	GET104	G.E.C.
OC73	2G373	Texas
OC73	NKT214	Newmarket
OC73	V10/30A-2	Newmarket
OC73	NKT224	Newmarket

OC74	2GT182	Radiospares
OC74	NKT222	Newmarket
OC74	NKT271	Newmarket
OC74	NKT272	Newmarket
OC74	2G378	Texas
OC74	TR-05	I.R.

OC75	2GT182	Radiospares
OC75	TR-04	I.R.
OC75	GET113	G.E.C.
OC75	GET102	G.E.C.
OC75	2G375	Texas

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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0C75	AC113	Thorn
0C75	NKT203	Newmarket
0C75	NKT213	Newmarket
0C75	NKT223	Newmarket
0C75	NKT274	Newmarket
0C75	AC138	A.T.E.S.
0C75	OC305	Intermetall
0C75	V10/50A-2	Newmarket
0C75	AC130,ASY58	STC
0C75	AC156	Thorn
0C76	NKT202	Newmarket
0C76	NKT212	Newmarket
0C76	GET103	G.E.C.
0C76	OC307	Intermetall
0C76	NKT222	Newmarket
0C76	V10/50A-2	Newmarket
0C76	AC128,ASY58	STC
0C76	2G376	Texas
0C76	TR15	I.R.
0C77	TR15	I.R.
0C77	GET111	G.E.C.
0C77	OC309	Intermetall
0C77	GET111	Gen. Electrics
0C77	V10/50A-2	Newmarket
0C77	NKT227	Newmarket
0C77	NKT217	Newmarket
0C77	NKT207	Newmarket
0C77	ASY51,ASY52	STC
0C77	2G377	Texas
0C78	2G378	Texas
0C78	NKT222	Newmarket
0C78	NKT251	Newmarket
0C78	NKT271	Newmarket
0C78D	NKT252	Newmarket
0C78D	NKT274	Newmarket
0C79	NKT222	Newmarket
0C79C	NKT222	Newmarket
0C80	NKT222	Newmarket
0C81	2GT182	Radiospares
0C81	2G301	Texas
0C81	NKT251	Newmarket
0C81	AC154	Thorn
0C81	NKT271	Newmarket
0C81	2G381	Texas
0C81	GET114	G.E.C.
0C81D	NKT272	Newmarket
0C81D	2GT174	Radiospares
0C81D	AC113	Thorn
0C81D	NKT252	Newmarket
0C81DM	NKT272	Newmarket
0C81DM	NKT274	Newmarket
0C81M	NKT271	Newmarket
0C81 Z	NKT217	Newmarket
0C82	NKT271	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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0C82	2G303	Texas
0C82	2G382	Texas
0C82	2GT182	Radiospares
0C82	NKT251	Newmarket
0C82D	NKT274	Newmarket
0C82D	NKT252	Newmarket
0C83	GET103	G.E.C.
0C83	2GT182	Radiospares
0C83	AC130,ASY58	STC
0C83	NKT218	Newmarket
0C83	NKT208	Newmarket
0C83	NKT228	Newmarket
0C83	NKT271	Newmarket
0C83D	NKT228	Newmarket
0C83D	NKT274	Newmarket
0C84	2GT182	Radiospares
0C84	NKT201	Newmarket
0C84	NKT211	Newmarket
0C84	NKT221	Newmarket
0C84	NK271	Newmarket
0C84	GET102	G.E.C.
0C84	GET104	G.E.C.
0C84D	NKT274	Newmarket
0C110	NKT223	Newmarket
0C120	NKT223	Newmarket
0C122	NKT221	Newmarket
0C122	NKT229	Newmarket
0C123	NKT227	Newmarket
0C130	NKT223	Newmarket
0C139	TR-07	I.R.
0C140	TR-07	I.R.
0C169	TR17	I.R.
0C169	NKT677	Newmarket
0C170	TR17	I.R.
0C170	V15/20R	Newmarket
0C170	NKT612	Newmarket
0C170	2G401	Texas
0C171	V15/20R	Newmarket
0C171	2G402	Texas
0C171	NKT613	Newmarket
0C171	TR17	I.R.
0C200	2S322	Texas
0C200	TR14	I.R.
0C200	2S302	Texas
0C201	2S303	Texas
0C201	2S323	Texas
0C201	TR14	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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OC201E	BCZ11	Mullard
OC201F	BCZ11	Mullard
OC202	2S324	Texas
OC203	2S301	Texas
OC203	2S321	Texas
OC303	NKT225	Newmarket
OC303	NKT215	Newmarket
OC304	TR14	I.R.
OC304/1	NKT224	Newmarket
OC304/1	NK275	Newmarket
OC304/2	NKT223	Newmarket
OC304/3	NKT223	Newmarket
OC305	TR14	I.R.
OC305/1	NKT223	Newmarket
OC305/1	NKT219	Newmarket
OC305/2	NKT219	Newmarket
OC305/N	NKT219	Newmarket
OC306	TR14	I.R.
OC306/1	NKT226	Newmarket
OC306/2	NKT226	Newmarket
OC306/3	NKT226	Newmarket
OC307	NKT212	Newmarket
OC307	TR15	I.R.
OC307	NKT222	Newmarket
OC308	NKT212	Newmarket
OC308	TR15	I.R.
OC308	NKT221	Newmarket
OC309	NKT217	Newmarket
OC309	NKT227	Newmarket
OC318	NKT221	Newmarket
OC318	NKT222	Newmarket
OC318	TR15	I.R.
OC320	NKT274	Newmarket
OC330	NKT274	Newmarket
OC330	TR14	I.R.
OC331	NKT274	Newmarket
OC331	TR13	I.R.
OC340	NKT274	Newmarket
OC340	TR15	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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OC341	NKT274	Newmarket
OC341	TR13	I.R.
OC342	NKT274	Newmarket
OC342	TR13	I.R.
OC343	NKT274	Newmarket
OC343	TR13	I.R.
OC350	NKT274	Newmarket
OC350	TR15	I.R.
OC351	NKT274	Newmarket
OC351	TR13	I.R.
OC360	NKT274	Newmarket
OC360	TR14	I.R.
OC361	NKT274	Newmarket
OC361	TR13	I.R.
OC362	TR13	I.R.
OC362	NKT274	Newmarket
OC363	NKT274	Newmarket
OC363	TR13	I.R.
OC364	NKT274	Newmarket
OC390	NKT677	Newmarket
OC390	TR13	I.R.
OC400	NKT677	Newmarket
OC410	NKT676	Newmarket
OC410	TR11	I.R.
OC430	TR14	I.R.
OC440	TR15	I.R.
OC460	TR14	I.R.
OC463	TR14	I.R.
OC601	NKT213	Newmarket
OC602	OC303	Intermetall
OC602	OC307	Intermetall
OC602	TR-05	I.R.
OC602	TR15	I.R.
OC602	OC340	Intermetall
OC602	NKT274	Newmarket
OC602S	NKT212	Newmarket
OC602SPEC	OC307	Intermetall
OC604	OC307	Intermetall
OC604	NKT219	Newmarket
OC604	NKT271	Newmarket
OC604	TR15	I.R.
OC604SPEC	OC308	Intermetall

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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OC610	NKT677	Newmarket
OC612	2N482, 2N483	Industro
OC612	TR13	I.R.
OC612	OC390	Intermetall
OC612	NKT677	Newmarket
OC613	OC410	Intermetall
OC613	2N485, 2N486	Industro
OC613	TR11	I.R.
OC614	NKT677	Newmarket
OC615	NKT675	Newmarket
OC615	NKT677	Newmarket
OC615	TR-06	I.R.
OC622	NKT274	Newmarket
OC623	OC360	Intermetall
OC623	NKT274	Newmarket
OC624	OC340	Intermetall
OC624	NKT274	Newmarket
OC700	2S323	Texas
OC700A	2S323	Texas
OC700B	2S323	Texas
OC701	2S323	Texas
OC702	2S323	Texas
OC702A	2S324	Texas
OC702B	2S324	Texas
OC703	2S321	Texas
OC703A	2S325	Texas
OC704	2S326	Texas
OC810	NKT213	Newmarket
OC811	NKT213	Newmarket
OC6016	NKT674	Newmarket
OD603	2N257	Intermetall
OD603	NKT304	Newmarket
OD603/50	NKT302	Newmarket
OD604	NKT303	Newmarket
OD605	NKT301	Newmarket
P03	GET103	G.E.C.
P04	GET116	G.E.C.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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PT12	TR-02	I.R.
PT25	TR-01	I.R.
PT30	TR-02	I.R.
PT40	TR-01	I.R.
PT50	TR-01	I.R.
PT150	TR-01	I.R.
PT501	TR-03	I.R.
PXA101	2GT117	Radiospares
PXA101	NKT73	Newmarket
PXA102	2GT117	Radiospares
PXA102	NKT72	Newmarket
PXB103	2GT182	Radiospares
PXB103	AC113	Thorn
PXB103	NKT274	Newmarket
PXB113	AC113	Thorn
PXC101	AC154	Texas
PXC101A	AC154	Thorn
PXC121	AC154	Thorn
PXC121	NKT271	Newmarket
PXC181	NKT271	Newmarket
R16	TR-05	I.R.
R120	TR-04	I.R.
R120	TR-05	I.R.
R255	TR-04	I.R.
R255	TR-05	I.R.
RS684	TR-06	I.R.
RS685	TR-06	I.R.
RS686	TR-07	I.R.
RS687	TR-07	I.R.
RS1554	TR-6	I.R.
SA495	V6/8R-10	Newmarket
SA496	V10/1S	Newmarket
SB100	TR11	I.R.
SB344	V15/20R	Newmarket
SC12	TR-05	I.R.
S025	TR-04	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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	TR-05	I.R.
ST11	TR14	I.R.
ST12	TR14	I.R.
ST13	TR14	I.R.
ST14	TR14	I.R.
ST15	TR14	I.R.
ST17	TR14	I.R.
ST21	ZT22	Ferranti
ST21	TR15	I.R.
ST22	TR15	I.R.
ST23	TR15	I.R.
ST24	TR15	I.R.
ST25	TR15	I.R.
ST26	TR15	I.R.
ST28A	TR-07	I.R.
ST28A	TR13	I.R.
ST28B	TR-07	I.R.
ST28B	TR13	I.R.
ST28C	TR-07	I.R.
ST28C	TR13	I.R.
ST28S	TR-07	I.R.
ST37	TR11	I.R.
ST37C	TR-06	I.R.
ST37D	TR-06	I.R.
ST37D	TR11	I.R.
ST64	TR-09	I.R.
ST65	TR-09	I.R.
ST66	TR-09	I.R.
ST73	TR-08	I.R.
ST75	TR10	I.R.
ST76	TR-08	I.R.
ST84	TR	I.R.
ST85	TR-09	I.R.
ST86	TR-09	I.R.
ST89	TR-09	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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ST122	TR-05	I.R.
ST122	TR15	I.R.
ST123	TR-05	I.R.
ST123	TR15	I.R.
ST162	TR-10	I.R.
ST172	TR-08	I.R.
ST201	TR11	I.R.
ST203	TR11	I.R.
ST204	TR11	I.R.
ST301	TR-05	I.R.
ST301	TR15	I.R.
ST302	TR-04	I.R.
ST302	TR-05	I.R.
ST303	TR-05	I.R.
ST303	TR15	I.R.
ST304	TR-05	I.R.
ST304	TR15	I.R.
ST311	TR14	I.R.
ST312	TR15	I.R.
ST313	TR14	I.R.
ST314	TR14	I.R.
ST315	TR15	I.R.
ST321	TR15	I.R.
ST322	TR-05	I.R.
ST322	TR15	I.R.
ST323	TR15	I.R.
ST324	TR15	I.R.
ST332	TR-04	I.R.
ST332	TR14	I.R.
ST332	TR-05	I.R.
ST370	TR-06	I.R.
ST370	TR11	I.R.
ST513	TR-08	I.R.
ST520	TR-08	I.R.
ST524	TR10	I.R.
ST722	ZT22	Ferranti
ST723	ZT22	Ferranti

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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ST724	ZT23	Ferranti
SYL105	TR-06	I.R.
SYL106	TR-06	I.R.
SYL107	TR-05	I.R.
SYL108	TR-05	I.R.
SYL1279	TR-09	I.R.
SYL1310	TR-08	I.R.
SYL1311	TR-08	I.R.
SYL1312	TR-08	I.R.
SYL1313	TR-10	I.R.
SYL1329	TR-09	I.R.
SYL1524	TR-09	I.R.
SYL1538	TR-09	I.R.
SYL1539	TR-09	I.R.
SYL1547	TR-09	I.R.
SYL1588/3	TR-04	I.R.
SYL2189	TR17	I.R.
TO039	TR-05	I.R.
T1001	TR-05	I.R.
T1003	TR-05	I.R.
T1005	TR-05	I.R.
T1025	2N354	Philco
T1033	TR-05	I.R.
T1040	2N301	RCA
T1040	2N352	Philco
T1041	2N353	Philco
T1041	2N301	RCA
T1159	2N355	Philco
T1166	2N393	Philco
T1167	2N386	Philco
T1168	2N387	Philco
T1232	TR-06	I.R.
T1233	TR-07	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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T1306	TR-06	I.R.
T1454	TR-07	I.R.
T1459	TR-07	I.R.
T1577	TR-04	I.R.
T1577	TR-05	I.R.
T1583	TR-05	I.R.
T1657	2N1747	Semiconductors
T1691	2N1727	Semiconductors
T1692	2N1728	Semiconductors
T1737	2N1748	Semiconductors
T1738	2N1749	Semiconductors
T1832	2N1742	Semiconductors
T1833	2N1743	Semiconductors
T1849	2N1744	Semiconductors
T1851	2N1750	Semiconductors
T1858	2N1745	Semiconductors
TA2063	AC138	A.T.E.S.
TA2065	AC139	A.T.E.S.
TP65	OC340	Intermetall
TP66/30	OC307	Intermetall
TP80	CIP1104	Intermetall
TP80/30	2N257	Intermetall
TP80/60	2N268	Intermetall
TJ1	NKT215	Newmarket
TJ1	NKT225	Newmarket
TJ1	V10/15A	Newmarket
TJ1	TR-05	I.R.
TJ2	NKT214	Newmarket
TJ2	NKT224	Newmarket
TJ2	V10/30A	Newmarket
TJ2	TR-05	I.R.
TJ3	V10/50A	Newmarket
TJ3	NKT224	Newmarket
TJ3	NKT214	Newmarket
TJ3	TR-05	I.R.
TK20	AST66	STC
TK20A	GET872	G.E.C.
TK20A	V6/4R-3	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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TK20B	V6/4R-2	Newmarket
TK21B	V6/2R-3	Newmarket
TK23	ACY31	Standard Tels.
TK23A	GET104	G.E.C.
TK23A	V10/50A	Newmarket
TK23A	NKT217	Newmarket
TK23A	NKT227	Newmarket
TK23C	NKT217	Newmarket
TK23C	NKT227	Newmarket
TK24	ASY64	Standard Tels.
TK24B	V6/2R-4	Newmarket
TK25	ASY60	Standard Tels.
TK25B	V6/8R	Newmarket
TK26B	V6/2R-3	Newmarket
TK27B	V6/2R-4	Newmarket
TK28	ASY63	Standard Tels.
TK28B	V6/2R-4	Newmarket
TK30C	2G301	Texas
TK30C	NKT126	Newmarket
TK30C	TR13	I.R.
TK30D	NKT126	Newmarket
TK30D	TR13	I.R.
TK31	ASY55	Standard Tels.
TK31C	2G302	Texas
TK31C	NKT125	Newmarket
TK31C	TR13	I.R.
TK31D	NKT125	Newmarket
TK31D	TR13	I.R.
TK33	ASY61	Standard Tels.
TK34	ASY62	Standard Tels.
TK35	ASY56	Standard Tels.
TK36	ASY57	Standard Tels.
TK37	ASY58	Standard Tels.
TK38	ASY59	Standard Tels.
TK40	ACY30	Standard Tels.
TK40A	GET102	G.E.C.
TK40A	NKT223	Newmarket
TK40A	NKT213	Newmarket
TK40A	V10/50A-2	Newmarket
TK40A	TR-05	I.R.

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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TK40C	NKT223	Newmarket
TK40C	NKT213	Newmarket
TK40C	AC156	Thorn
TK40C	TR-05	I.R.
TK41	ACY27	Standard Tels.
TK41C	NKT214	Newmarket
TK41C	NKT224	Newmarket
TK41C	TR-05	I.R.
TK42	ACY28	Standard Tels.
TK42C	NKT213	Newmarket
TK42C	NKT223	Newmarket
TK42C	AC156	Thorn
TK42C	TR-05	I.R.
TK45	ACY29	Standard Tels.
TK45C	NKT216	Newmarket
TK45C	NKT226	Newmarket
TK45C	TR-05	I.R.
TK46	ASY50	Standard Tels.
TK46C	NKT215	Newmarket
TK46C	NKT225	Newmarket
TK47C	NKT215	Newmarket
TK47C	NKT225	Newmarket
TK48C	NKT217	Newmarket
TK48C	NKT227	Newmarket
TK49	ASY53	Standard Tels.
TK49C	NKT1713	Newmarket
TK49C	TR-09	I.R.
TK400A	NKT404	Newmarket
TK401A	NKT401	Newmarket
TK402A	NKT402	Newmarket
TR30	TR-05	I.R.
TR30X	TR-06	I.R.
TR100	TR-07	I.R.
TR-760	2N520	Industro
TR-761	2N521	Industro
TR-762	2N522	Industro
TR-763	2N523	Industro
TR811	2N633	Industro
TR812	2N482	Industro
TR813	2N485	Industro
TR814	2N363	Industro
TS1	NKT215	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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TS1	NKT225	Newmarket
TS1	V10/15A-2	Newmarket
TS1	TR-05	I.R.
TS2	TR-05	I.R.
TS2	NKT214	Newmarket
TS2	NKT224	Newmarket
TS2	V10/30A-2	Newmarket
TS3	NKT214	Newmarket
TS3	NKT224	Newmarket
TS3	TR-05	I.R.
TS3	V10/50A-2	Newmarket
TS7	GET873	G.E.C.
TS7	V6/4R-2	Newmarket
TS7	NKT73	Newmarket
TS8	GET874	G.E.C.
TS8	V6/8R	Newmarket
TS8	NKT72	Newmarket
TS9	V10/50A-2	Newmarket
TS9	GET103	G.E.C.
TS13	GET103	G.E.C.
TS13	TR-05	I.R.
TS13	NKT214	Newmarket
TS13	NKT224	Newmarket
TS13	NKT274	Newmarket
TS13	V10/50A-2	Newmarket
TS14	NKT225	Newmarket
TS14	NKT275	Newmarket
TS14	V10/30A-2	Newmarket
TS14	TR-05	I.R.
TS14	GET103	G.E.C.
TS15	NKT217	Newmarket
TS15	NKT227	Newmarket
TS15	V10/30A-2	Newmarket
TS17	GET103	G.E.C.
TS17	V10/50A-2	Newmarket
TS17	NKT271	Newmarket
TS161	2-OC72	Rogers
TS162	OC71	Rogers
TS163	OC71	Rogers
TS164	OC71	Rogers
TS165	OC72	Rogers
TS166	OC70	Rogers
TS176	2N301	RCA
TS176	TR-01	I.R.
TS615	2N464	Industro
TS620	2N465	Industro
TS621	2N466	Industro

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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TS621	OC70	Rogers
TS627	TR-05	I.R.
TS629	TR-05	I.R.
TS630	2N465	Industro
TS672A	TR-06	I.R.
TS672B	TR-07	I.R.
TS673A	TR-06	I.R.
TS673B	TR-07	I.R.
TS1007	TR-04	I.R.
TS1007	TR-05	I.R.
V6/1R	NKT164	Newmarket
V6/2R	TR13	I.R.
V6/2R	NKT143	Newmarket
V6/2R	NKT164	Newmarket
V6/2RC	NKT164	Newmarket
V6/2RM	NKT164	Newmarket
V6/3R	NKT164	Newmarket
V6/3RM	NKT164	Newmarket
V6/4R	NKT143	Newmarket
V6/4R	NKT163	Newmarket
V6/4R	TR13	I.R.
V6/4RM	NKT162	Newmarket
V6/4RC	NKT163	Newmarket
V6/6R	NKT163	Newmarket
V6/6RM	NKT162	Newmarket
V6/8R	NKT142	Newmarket
V6/8R	NKT162	Newmarket
V6/8R	TR13	I.R.
V6/8RC	NKT162	Newmarket
V6/8RM	NKT162	Newmarket
V6/R2	NKT143	Newmarket
V6/R2	NKT164	Newmarket
V6/R4	GET873	G.E.C.
V6/R4	2G301	Texas
V6/R4	NKT143	Newmarket
V6/R4	NKT163	Newmarket
V6/R4	TR13	I.R.
V6/R8	TR13	I.R.
V6/R8	GET874	G.E.C.
V6/R8	NKT142	Newmarket
V6/R8	NKT162	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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V6/R8	2G302	Texas
V6/R8	GET872	G.E.C.
V10/1S	NKT125	Newmarket
V10/1S	TR13	I.R.
V10/1SJ	NKT125	Newmarket
V10/1SJ	TR13	I.R.
V10/2S	NKT126	Newmarket
V10/2S	TR13	I.R.
V10/2SJ	NKT126	Newmarket
V10/2SJ	TR13	I.R.
V10/15A	NKT225	Newmarket
V10/15A	NKT275	Newmarket
V10/15A	TR-05	I.R.
V10/15AC	NKT215	Newmarket
V10/15AC	NKT275	Newmarket
V10/15AC	TR15	I.R.
V10/15C	2G302	Texas
V10/25C	2G301	Texas
V10/30A	GET114	G.E.C.
V10/30A	NKT224	Newmarket
V10/30A	NKT275	Newmarket
V10/30A	TR-05	I.R.
V10/30AC	NKT214	Newmarket
V10/30AC	NKT275	Newmarket
V10/30AC	TR15	I.R.
V10/50	NKT271	Newmarket
V10/50A	NKT223	Newmarket
V10/50A	TR-05	I.R.
V10/50A	NKT271	Newmarket
V10/50AC	NKT213	Newmarket
V10/50AC	NKT271	Newmarket
V10/50AC	TR15	I.R.
V10/50B	TR-05	I.R.
V10/50B	GET114	G.E.C.
V10/50B	NKT223	Newmarket
V10/50B	NKT271	Newmarket
V15/10P	NKT452	Newmarket
V15/10PD	NKT452	Newmarket
V15/20IP	GET115	G.E.C.
V15/20IP	NKT303	Newmarket
V15/20NP	GET571	G.E.C.
V15/20PD	NKT452	Newmarket
V15/20P	NKT452	Newmarket
V15/20R	NKT677	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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V15/30P	GET7	G.E.C.
V15/30P	NKT452	Newmarket
V15/30PD	NKT452	Newmarket
V25/15P	NKT452	Newmarket
V25/15PD	NKT452	Newmarket
V25/15	NKT452	Newmarket
V25/30	NKT452	Newmarket
V25/30PD	NKT452	Newmarket
V25/50	NKT271	Newmarket
V30/10P	NKT452	Newmarket
V30/10PD	NKT452	Newmarket
V30/20IP	GET116	G.E.C.
V30/20IP	NKT303	Newmarket
V30/20P	NKT452	Newmarket
V30/20PD	NKT452	Newmarket
V30/30NP	GET572	G.E.C.
V30/30P	NKT452	Newmarket
V30/30P	GET8	G.E.C.
V30/30P	NKT404	Newmarket
V30/30PD	NKT404	Newmarket
V60/10P	NKT403	Newmarket
V60/10PD	NKT403	Newmarket
V60/20IP	NKT301	Newmarket
V60/20P	NKT403	Newmarket
V60/20PD	NKT403	Newmarket
V60/30NP	GET573	G.E.C.
V60/30P	NKT403	Newmarket
VB701	V10/50A-2	Newmarket
VB704	V10/30A-2	Newmarket
VB705	V10/30A	Newmarket
VB706	V10/50A	Newmarket
VB707	V6/4R	Newmarket
VB708	V6/8R	Newmarket
VB709	V10/50A-2	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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VB710	V10/50A	Newmarket
WTV3MC	TR-06	I.R.
WTV6MC	TR-06	I.R.
WTV12MC	TR-06	I.R.
WTV15PMG	TR-04	I.R.
WTV15VMG	TR-05	I.R.
WTV20MC	TR-06	I.R.
WTV20VH6	TR-05	I.R.
WTV20VMG	TR-05	I.R.
WTV30VHG	TR-05	I.R.
WTV30VLG	TR-05	I.R.
WTV30VMG	TR-05	I.R.
WTV99 Pwr	TR-01	I.R.
WTV99 Pwr	TR-02	I.R.
WTV129Pwr	TR-03	I.R.
WTV199Pwr	TR-01	I.R.
WTV229Pwr	TR-03	I.R.
WTVL6	TR-08	I.R.
WTVPwr6	TR-01	I.R.
WTVPwr6	TR-02	I.R.
WTVPwr12	TR-01	I.R.
WTVPwr25	TR-01	I.R.
WTVPwr40	TR-01	I.R.
WTVSA7	TR-08	I.R.
WTVSK7	TR-08	I.R.
WTVSQ7	TR-08	I.R.
X137	2N677B	Sylvania
XA101	NKT73	Newmarket
XA101	NKT133	Newmarket
XA101	NKT143	Newmarket
XA101	NKT153,25	Newmarket
XA101	OC41	Mullard
XA101	GET87?	G.E.C.
XA101	2G301	Texas
XA101	V6/4R-2	Newmarket
XA102	V6/8R-2	Newmarket
XA102	2G302	Texas
XA102	OC42	Mullard

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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XA102	GET874	G.E.C.
XA102	NKT72	Newmarket
XA102	NKT132	Newmarket
XA102	NKT142	Newmarket
XA102	NKT152	Newmarket
XA103	NKT143	Newmarket
XA104	NKT143	Newmarket
XA111	NKT143	Newmarket
XA111	NKT133	Newmarket
XA111	OC45	Mullard
XA111	GET873	G.E.C.
XA111	NKT142	Newmarket
XA112	NKT141	Newmarket
XA112	GET874	G.E.C.
XA112	OC44	Mullard
XA121	GET691	G.E.C.
XA122	GET692	G.E.C.
XA131	2G401	Texas
XA131	2N384	R.C.A.
XA131	OC171	Mullard
XA131	NKT677	Newmarket
XA141	2G403	Texas
XA141	NKT677	Newmarket
XA141	2N643	R.C.A.
XA141	ASZ20	Mullard
XA142	NKT677	Newmarket
XA142	2G403	Texas
XA142	2N644	R.C.A.
XA142	ASZ20	Mullard
XA143	NKT677	Newmarket
XA143	ASZ21	Mullard
XA143	2G403	Texas
XA143	2N645	R.C.A.
XA151	OC41	Mullard
XA151	2G301	Texas
XA151	NKT125	Newmarket
XA151	NKT106,126	Newmarket
XA151	GET871	G.E.C.
XA152	2G302	Texas
XA152	NKT105,125	Newmarket
XA152	OC42	Mullard
XA152	GET872	G.E.C.
XA161	2G403	Texas
XA161	NKT677	Newmarket
XA161	2N711	G.E.C.
XA161	2N1300	R.C.A.
XA161	ASZ20	Mullard
XA162	ASZ20/1	Mullard
XA162	2N1301	R.C.A.
XA162	NKT677	Newmarket
XA162	2G403	Texas
XA701	2N1302	Texas

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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XA701	0C140	Mullard
XA701	2N585	R.C.A.
XA702	0C141	Mullard
XA702	2N1304	Texas
XA702	2N1090	R.C.A.
XA703	0C141	Mullard
XA703	2N1091	R.C.A.
XA703	2N1306	Texas
XB102	2GT182	Radiospares
XB102	0C71	Mullard
XB102	NKT204	Newmarket
XB102	NKT215	Newmarket
XB102	NKT225	Newmarket
XB102	NKT275	Newmarket
XB102	2G303	Texas
XB102	GET103	G.E.C.
XB102	TR-05	I.R.
XB102	V10/30A-1	Newmarket
XB103	NKT224	Newmarket
XB103	NKT214	Newmarket
XB103	2G303	Texas
XB103	NKT203	Newmarket
XB103	TR-05	I.R.
XB103	NKT274	Newmarket
XB103	GET103	G.E.C.
XB103	0C75	Mullard
XB103	V10/50A-1	Newmarket
XB103	AC113	Thorn
XB104	NKT252, 262	Newmarket
XB104	NKT215	Newmarket
XB104	NKT202	Newmarket
XB104	0C75	Mullard
XB104	TR-05	I.R.
XB104	2G303	Texas
XB104	V10/30A-1	Newmarket
XB104	NKT225	Newmarket
XB104	GET114	G.E.C.
XB112	GET103	G.E.C.
XB112	0C71	Mullard
XB112	GET114	G.E.C.
XB112	TR-05	I.R.
XB112	NKT215	Newmarket
XB112	NKT225	Newmarket
XB112	NKT204, 224	Newmarket
XB113	AC113	Thorn
XB113	TR-05	I.R.
XB113	GET113	G.E.C.
XB113	GET102	G.E.C.
XB113	0C75	Mullard
XB113	NKT214	Newmarket
XB113	NKT224	Newmarket
XB113	NKT203	Newmarket
XB113	NKT252, 262	Newmarket
XB113	NKT274	Newmarket
XB114	GET114	G.E.C.
XB121	2N398	R.C.A.
XB121	0C77	Mullard
XB121	NKT207	Newmarket
XC101	2GT174	Radiospares

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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XC101	TR-05	I.R.
XC101	AC154	Thorn
XC101	NKT222	Newmarket
XC101	NKT252	Newmarket
XC101	NKT253	Newmarket
XC101	NKT271	Newmarket
XC101	V10/50A-1	Newmarket
XC101	0C72, 83	Mullard
XC101	GET103	G.E.C.
XC111	GET114	G.E.C.
XC111	GET103	G.E.C.
XC111	TR-05	I.R.
XC111	NKT222	Newmarket
XC121	NKT221	Newmarket
XC121	GET103	G.E.C.
XC121	NKT251	Newmarket
XC121	0C72, 83	Mullard
XC121	V10/50A-2	Newmarket
XC121	TR-05	I.R.
XC121	AC154	Thorn
XC131	GET103	G.E.C.
XC131	V10, 50A-2	Newmarket
XC131	NKT251	Newmarket
XC131	NKT271	Newmarket
XC141	GET572	G.E.C.
XC141	NKT404	Newmarket
XC141	NKT452	Newmarket
XC141	2N301	R.C.A.
XC141	2N456	Texas
XC142	NKT403	Newmarket
XC142	NKT404	Newmarket
XC142	GET573	G.E.C.
XC142	2N457	Texas
XC142	2N301/A	R.C.A.
XC155	NKT404	Newmarket
XC155	GET573	G.E.C.
XC156	NKT404	Newmarket
XC161	NKT228	Newmarket
XC161	TR-05	I.R.
XC163	NKT303	Newmarket
XC171	NKT251	Newmarket
XC171	NKT271	Newmarket
XC703	2N1479	R.C.A.
XC713	XB24B	Texas
XC713	2N1483	R.C.A.
XC723	XB24B	Texas
XC723	2N1487	R.C.A.
XPT2	V10/50A-1	Newmarket
XS101	0C139	Mullard
XS101	V10/2S	Newmarket
XS111	V6/2R	Newmarket

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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XU604	BY101, BY114	Thorn
Y203A	XS101	Ediswan
Y203A2	XS104	Ediswan
Y203HB	XS121	Ediswan
Y214N2	XC142	Ediswan
Y214N5	XC155	Ediswan
Y214N6	XC156	Ediswan
Y215J1	XA151	Ediswan
Y215J2	XA152	Ediswan
Y217HA1	XA141	Ediswan
Y217HA2	XA142	Ediswan
Y217HA3	XA143	Ediswan
Y221HB1	XA161	Ediswan
Y221HB2	XA162	Ediswan
Y222HB	XB121	Ediswan
Y401J1	XA701	Ediswan
Y401J2	XA702	Ediswan
Y401J3	XA703	Ediswan

TRANSISTOR	SUBSTITUTE	MANUFACTURER
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Y1408HB1	XC703	Ediswan
Y1409JA1	XC713	Ediswan
Y1410PA1	XC723	Ediswan
ZT20	2S101	Texas
ZT20	2S102	Texas
ZT21	2S101	Texas
ZT21	2S103	Texas
ZT22	2S102	Texas
ZT23	2S103	Texas
ZT24	2S104	Texas
ZT40	2S101	Texas
ZT41	2S101	Texas
ZT42	2S102	Texas
ZT43	2S103	Texas
ZT706	2N706A	Texas
ZT706A	2ST10	Radiospares
ZT708	2N753	Texas
ZT1708	2N706A	Texas

NOTE:

Unlike valves, no two transistors can be considered to be exactly equivalent, therefore before substitution, reference should be made to the relevant manufacturers literature.

Part No. 93007

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